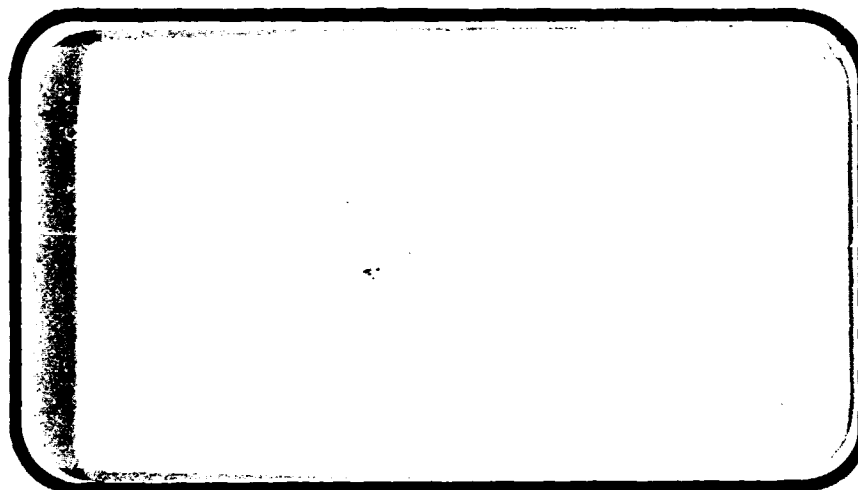




NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



NASA-CR-128783) HYPERSONIC PERFORMANCE,
STABILITY AND CONTROL CHARACTERISTICS OF
A .0075 SCALE MODEL ROCKWELL
INTERNATIONAL 089B-139B ORBITER (Chrysler
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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA Management services

SPACE DIVISION  CHRYSLER
CORPORATION

October, 1973

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NASA-CR-128,783

HYPersonic PERFORMANCE, STABILITY AND CONTROL
CHARACTERISTICS OF A .0075 SCALE MODEL ROCKWELL
INTERNATIONAL O89B-139B ORBITER CONFIGURATION

By

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T. A. Blackstock, NASA/LaRC

Prepared under NASA Contract Number NAS 5-13247

by

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: LaRC CFHT 96
NASA Series No.: LA-11
Date: July 11-20, 1973; 40 Occ. Hr.

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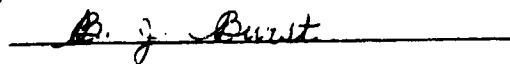
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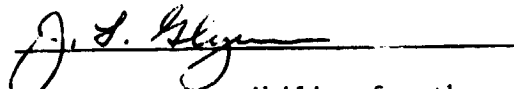
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HYPersonic PERFORMANCE, STABILITY AND CONTROL CHARACTERISTICS
OF A .0075 SCALE MODEL ROCKWELL INTERNATIONAL 089B-139B
ORBITER CONFIGURATION

By

R. W. Powell &
T. A. Blackstock

SUMMARY

An investigation was made in the Langley Continuous Flow Hypersonic Tunnel at a Mach Number of 10.3 to study the hypersonic aerodynamic characteristics of a Rockwell International shuttle orbiter configuration. Tests were made at a Reynolds number of $.79 \times 10^6$ based on body length with an angle-of-attack range of 10° to 35° and sideslip variations of $+1^\circ$ to -9° . The effects of elevon and body flap deflection were investigated.

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INDEX OF DATA FIGURES

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Effect of Elevator Deflection on Lateral- Directional Derivatives	B	ELEVTR	5
Effect of Aileron Deflection on Basic Longitudinal Characteristics	A	AJLRON	6-9
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Effect of Body Flap Deflection on Basic Longitudinal Characteristics	A	BDFLAP	11-14
Comparison of Aileron Derivatives for Opposite Control Deflection	C	DLTALN	15-16
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INDEX OF DATA FIGURES (CONTINUED)

TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Effect of Control Deflections in Sideslip	D	ELEVTR	
($\alpha = 10^\circ$)			33-34
($\alpha = 15^\circ$)			35-36
($\alpha = 20^\circ$)			37-38
($\alpha = 25^\circ$)			39-40
($\alpha = 30^\circ$)			41-42
($\alpha = 35^\circ$)			43-44

SCHEDULE OF COEFFICIENTS PLOTTED:

- A) CN, CL, CIM, L/D, CA, CD vs. ALPHA
CN, CL vs. CIM; CD vs. CL
- B) DCY/DB, DCYNDB, LCBLDB vs. ALPHA
- C) DCY/DA, DCYNDA, DCBLDA vs. ALPHA
- D) CN, CA, CIM, CY, CYN, CBL vs. BETA

NOMENCLATURE General

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C _p	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m ² , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m ² , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m ³ , slugs/ft ³
<u>Reference & C.G. Definitions</u>		
A _b		base area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
\bar{L}_{REF} c	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m ² , ft ²
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CEL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

Stability-Axis System

C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
L/D	L/D	lift-to-drag ratio; C_L/C_D

NOMENCLATURE (Concluded)

ADDITIONS TO STANDARD LIST

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$C_{Y\beta}$	DCY/DB	side force coefficient derivative with sideslip angle, $\partial C_Y / \partial \beta$, per degree
$C_{n\beta}$	DCYNDB	yawing moment coefficient derivative with sideslip angle, $\partial C_n / \partial \beta$, per degree
$C_{l\beta}$	DCBLDB	rolling moment coefficient derivative with sideslip angle, $\partial C_l / \partial \beta$, per degree
$C_{Y\delta_a}$	DCY/DA	side force coefficient derivative with aileron deflection, $\partial C_Y / \partial \delta_a$, per degree
$C_{n\delta_a}$	DCYNDA	yawing moment coefficient derivative with aileron deflection, $\partial C_n / \partial \delta_a$, per degree
$C_{l\delta_a}$	DCBLDA	rolling moment coefficient derivative with aileron deflection, $\partial C_l / \partial \delta_a$, per degree
δ_{eL}	-	left elevon deflection, trailing edge down positive
δ_{eR}	-	right elevon deflection, trailing edge down positive
δ_a	AILRON	elevon deflection for roll control $\left[(\delta_{eL} - \delta_{eR}) / 2 \right]$, degrees
δ_e	ELEVTR	elevon deflection for pitch control, $\left[(\delta_{eL} + \delta_{eR}) / 2 \right]$, degrees
δ_{BF}	BDFLAP	body flap deflection, trailing edge down positive, degrees

TEST FACILITY DESCRIPTION

The Mach 10 nozzle of the Langley continuous flow hypersonic tunnel is designed to operate at stagnation pressures of 15 to 150 atmospheres at temperatures up to 1960°R. Air is preheated electrically by passing through a multi-tube heater. The nozzle has a 31-inch square test section which incorporates a moveable second minimum. Continuous operation is achieved by passing the air through a series of compressors. Additional information on this facility is given in NASA TM X-1130 titled, "Characteristics of Major Active Wind Tunnels at the Langley Research Center," by William T. Schaefer, Jr.

CONFIGURATION INVESTIGATED

The configuration tested was a 0.0075 scale model of a blend of Rockwell International shuttle configurations. The model consisted of a 089B configuration with a 139B configuration nose forward of F.S. 500. A sketch of the model is shown in figure 2. All of the tests were made with the rudder flared to form a 10° wedge vertical tail. Tests were made with elevon deflections ranging from +10° to -40° and body flap deflections of 0° and -14.25°.

DATA REDUCTION

A LaRC 2019A six-component strain gage balance was used to measure orbiter aerodynamic forces and moments. All data are presented about a

center of gravity located at 65 percent of the body length. Data were converted to standard NASA coefficients using the following constants:

Reference area, S_{ref} = wing planform area = 21.7886 sq. in.

Reference length, \bar{c} = wing mean aerodynamic chord = 3.561 in.

Reference span, b_{ref} = wing span = 7.025 in.

TABLE I. TEST CONDITIONS

[illegible]

TABLE II.

TEST: LARC CFHT 96										DATA SET/RUN NUMBER COLLATION SUMMARY															DATE :
DATA SET IDENTIFIER		CONFIGURATION		SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)															
				α β		δ_{el} δ_{er} δ_{ef}				10.3 4 5 11 10 9 8 7 6 12 13 21 20 19 18 17 15 32 33															
RPD001		ROCKWELL ϕ RB 089B		A O		O O -14.25																			
02		W/HOD. NOSE		A -5		T T T																			
03				10 B		T T T																			
04				15 T																					
05				20																					
06				25																					
07				30																					
08				35																					
09				A O		-10 -10																			
10				A -5		T T T																			
11				10 B																					
12				15 T																					
13				20																					
14				25																					
15				30																					
16				35																					
17				A O		-20 -20																			
18				A -5		-20 -20																			

TABLE II. - (CONTINUED)

TEST: LARC CFHT 96										DATA SET/RUN NUMBER COLLATION SUMMARY																	DATE :																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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TABLE II. - (CONTINUED)

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TABLE II. - (CONTINUED)

TEST: LARC CFHT 96

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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TABLE II. - (CONCLUDED)

[illegible]

TABLE III.
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - 089B-139B (Modified Nose)

GENERAL DESCRIPTION : Nose section from full-scale station 238.0 to
STA. 500 from NAR drawing VL70-000139B. Remaining body AFT of STA 500
from NAR drawing VL70-000093

Scale Model = .0075

DRAWING NUMBER : VL70-000093

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length	<u>1290.3</u>	<u>9.677</u>
Max Width	<u>265.0</u>	<u>1.988</u>
Max Depth	<u>248.0</u>	<u>1.860</u>
Fineness Ratio	<u>4.869</u>	<u>4.869</u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u>456.40</u>	<u>.02567</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. MODEL COMPONENT DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: ELEVONGENERAL DESCRIPTION: CONFIGURATION PER LINES VL70-000093DATA FOR (1) OF (2) SIDESMODEL SCALE = .0075DRAWING NUMBER: VL70-000093

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>205.517</u>	<u>.0116</u>
Span (equivalent)	<u>353.34</u>	<u>2.650</u>
Inb'd equivalent chord	<u>114.78</u>	<u>.861</u>
Outb'd equivalent chord	<u>55.00</u>	<u>.413</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>.208</u>	<u>.208</u>
At Outb'd equiv. chord	<u>.400</u>	<u>.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Trailing Edge	<u>-10.02</u>	<u>-10.02</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line)-ft ³	<u>1548.07</u>	<u>.000653</u>

TABLE III. MODEL COMPONENT DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: WINGGENERAL DESCRIPTION: Orbiter Configuration per Lines VL70-000093.NOTE: (Dihedral angle is defined at the lower surface of the wing at the
75.33% element line projected into a plane perpendicular to the FRL).

SCALE MODEL = .0075

DRAWING NUMBER: VL70-000093

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
<u>TOTAL DATA</u>		
Area	2690.00	.1513
Planform		
Wetted		
Span (equivalent)	936.68	7.025
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	3.000	3.000
Aerodynamic Twist, degrees	+3.000	+3.000
Toe-In Angle		
Cant Angle		
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	-10.24	-10.24
0.25 Element Line	35.209	35.209
Chords:		
Root (Wing Sta. 0.0)	689.24	5.169
Tip, (equivalent)	137.85	1.034
MAC	474.81	3.561
Fus. Sta. of .25 MAC	1136.89	8.527
W.P. of .25 MAC	299.20	2.244
B.L. of .25 MAC	182.13	1.366
Airfoil Section		
Root		
Tip		
<u>EXPOSED DATA</u>		
Area	1752.29	.0986
Span, (equivalent)	720.68	5.405
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root	562.40	4.218
Tip	137.85	1.034
MAC	393.03	2.948
Fus. Sta. of .25 MAC	1185.31	8.890
W.P. of .25 MAC	300.20	2.252
B.L. of .25 MAC	143.76	1.078

TABLE III. MODEL COMPONENT DIMENSIONAL DATA (CONTINUED)

MODEL COMPONENT: Vertical Tail

GENERAL DESCRIPTION: Centerline vertical tail double wedge airfoil with
rounded leading edge.

Scale Model = .0075

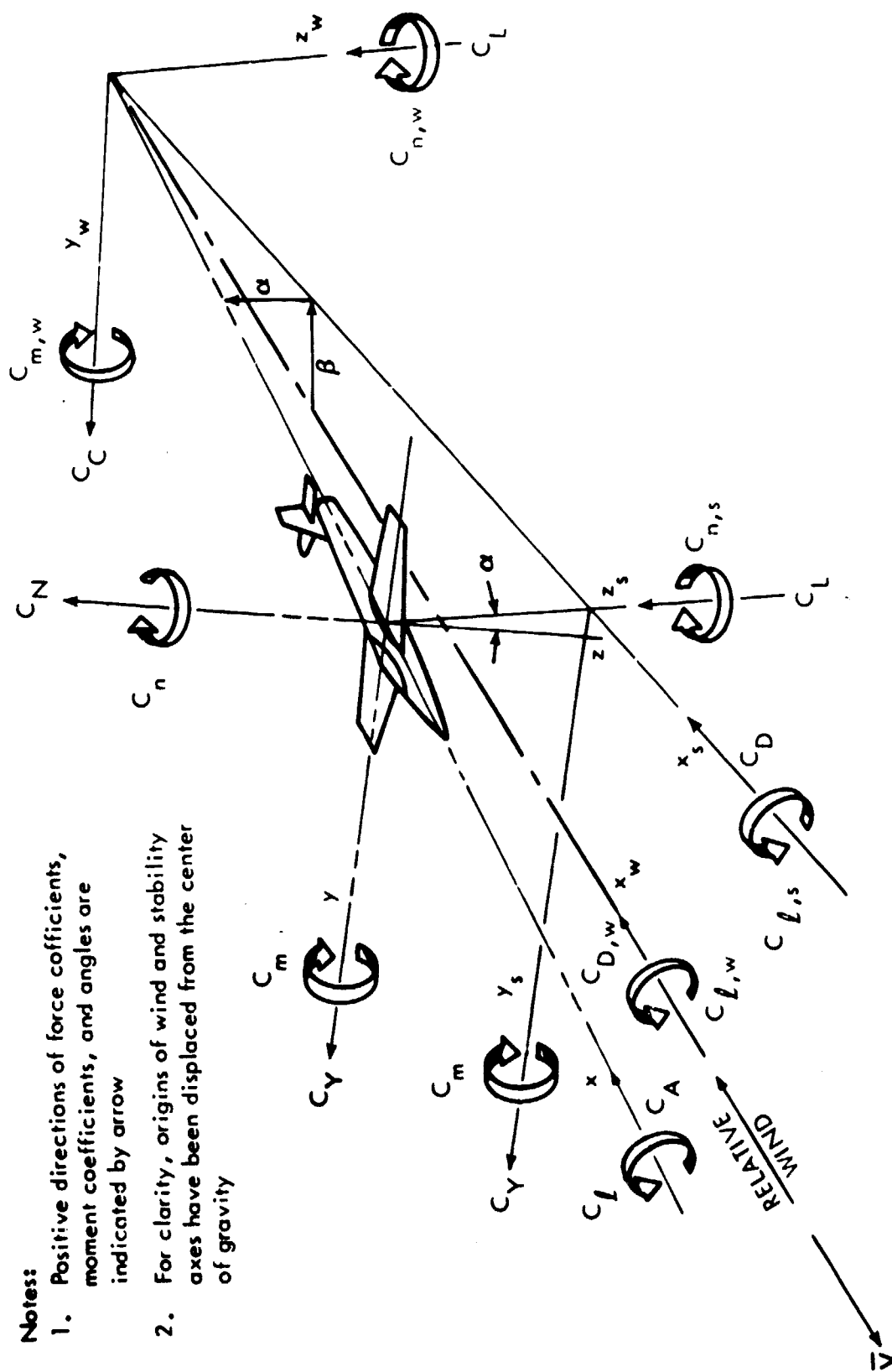
DRAWING NUMBER: VL70-000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>413.25</u>	<u>.0232</u>
Span (equivalent)	<u>315.72</u>	<u>2.368</u>
Inb'd equivalent chord	<u>268.50</u>	<u>2.014</u>
Outb'd equivalent chord	<u>108.47</u>	<u>.814</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u> </u>	<u> </u>
At Outb'd equiv. chord	<u> </u>	<u> </u>
Sweep Back Angles, degrees		
Leading Edge	<u>45</u>	<u>45</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
Hingeline	<u> </u>	<u> </u>
Area Moment (Normal to hinge line)	<u> </u>	<u> </u>

TABLE III. MODEL COMPONENT DIMENSIONAL DATA (CONCLUDED)

MODEL COMPONENT: RUDDERGENERAL DESCRIPTION: CONFIGURATION PER LINES VL70-000095SCALE MODEL = .0075DRAWING NUMBER: VL70-000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>106.38</u>	<u>.00598</u>
Span (equivalent)	<u>201.0</u>	<u>1.508</u>
Inb'd equivalent chord	<u>91.585</u>	<u>.687</u>
Outb'd equivalent chord	<u>50.833</u>	<u>.381</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Normal to hinge line)-ft ³	<u>526.125</u>	<u>.000222</u>



- Notes:**
1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrow
 2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

Figure 1. - Axis Systems.

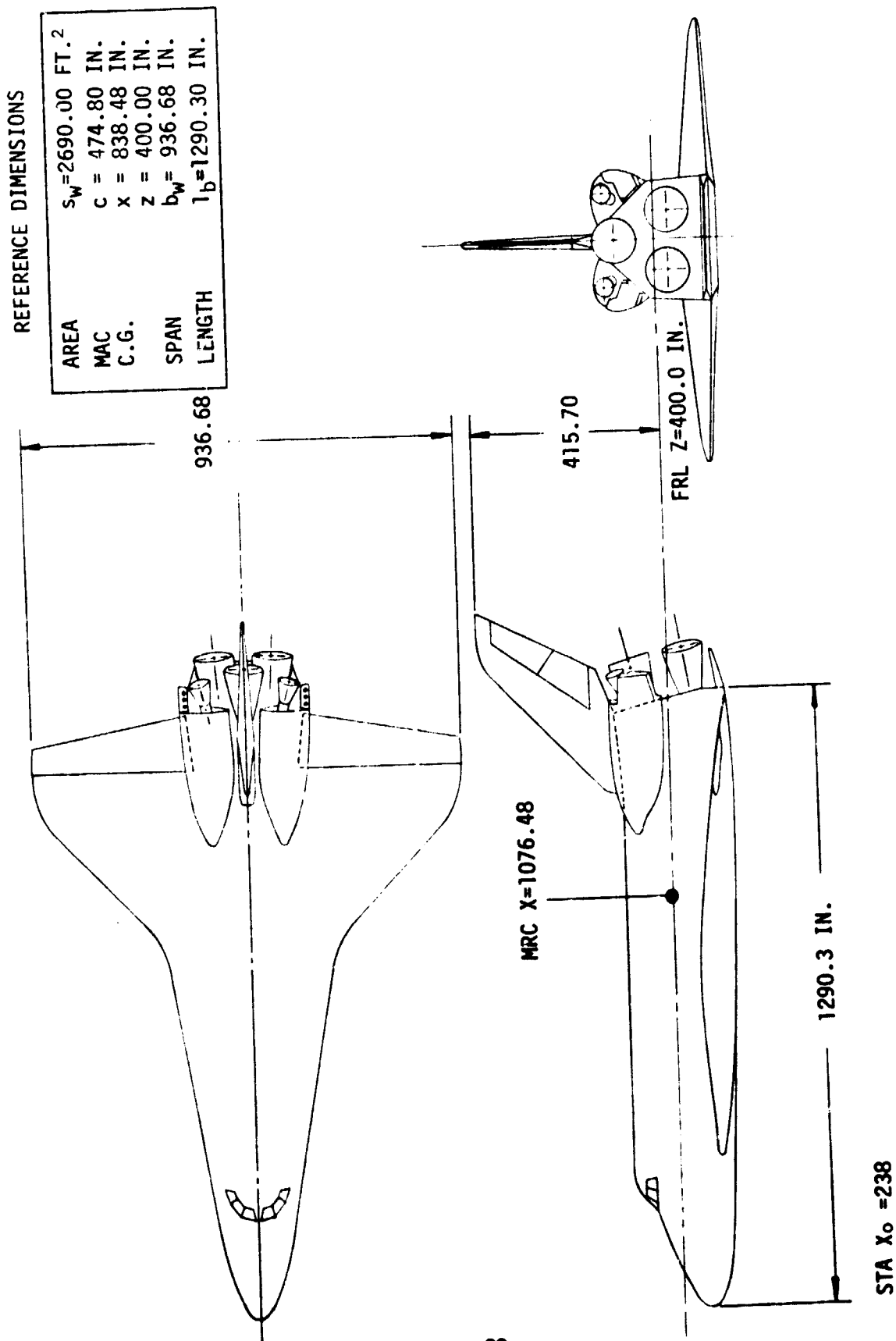


Figure 2. - SSV Orbiter Configuration 3 Baseline.

DATA FIGURES

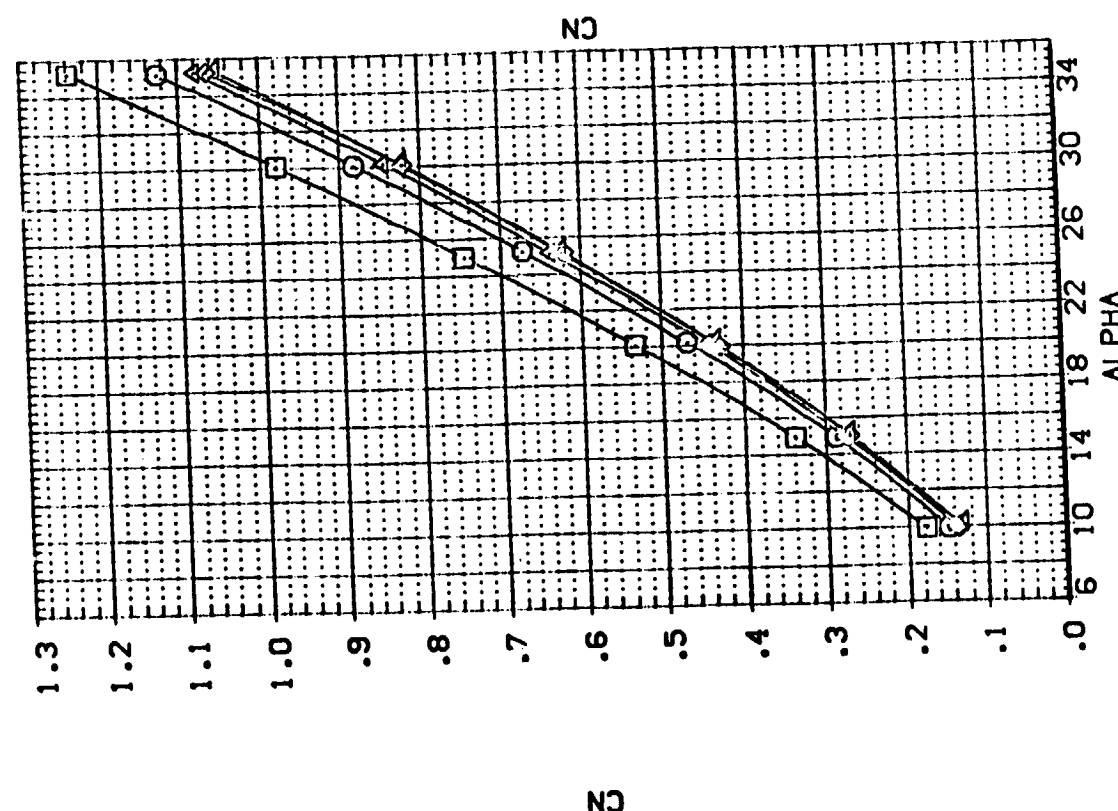
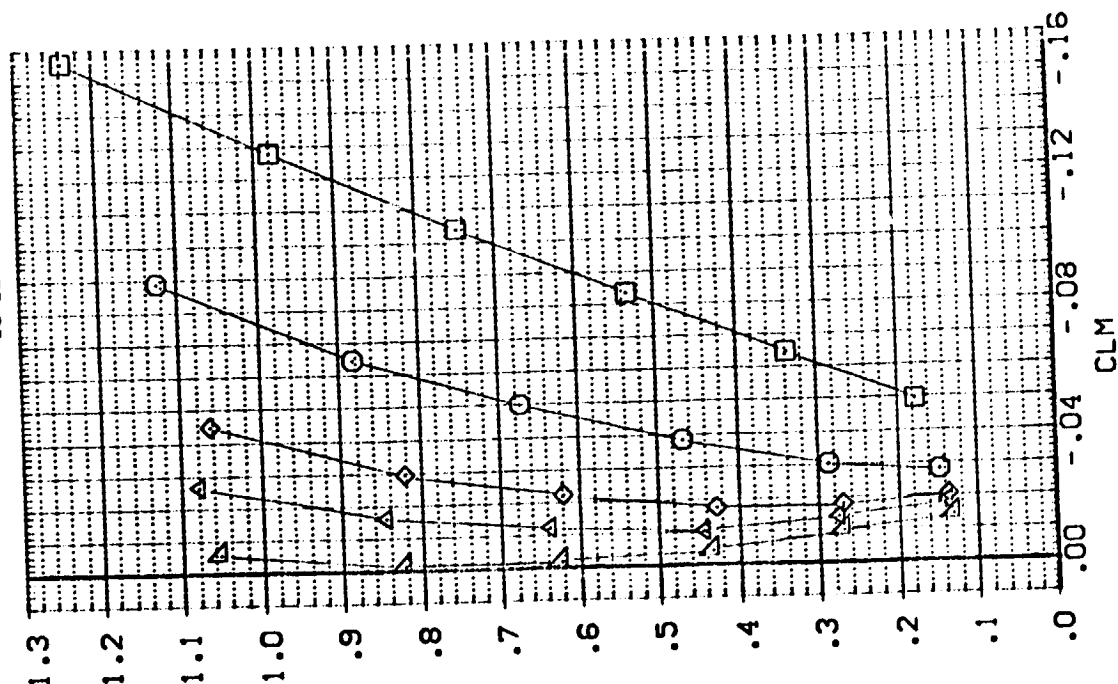
• ୩୩୩୩୩
Zzzzzzzzzz
- ୧ ୧ ୧ ୧ ୧
• ୦୦୦୦୦
Gggggggg

BETA	ELE TR	AILRON	BOFLAP
.000	10.000	.000	-14.250
.000	.000	.000	-14.250
.000	.000	.000	-14.250
.000	-10.000	.000	-14.250
.000	-20.000	.000	-14.250
.000	-40.000	.000	-14.250

CONF	IGRATION	DESCRIPTION
--11	CFHT 96.	ROCKVELL CRB.
--11	CFHT 96.	ROCKVELL CRB.
--11	CFHT 96.	ROCKVELL CRB.
--11	CFHT 96.	ROCKVELL CRB.
--11	CFHT 96.	ROCKVELL CRB.

DATA SET SYMBOL

0898 A/V/D. C/A/V/C.
0893 A/V/D. C/A/V/C.
0893 A/V/D. C/A/V/C.
0893 A/V/D. C/A/V/C.
0893 A/V/D. C/A/V/C.



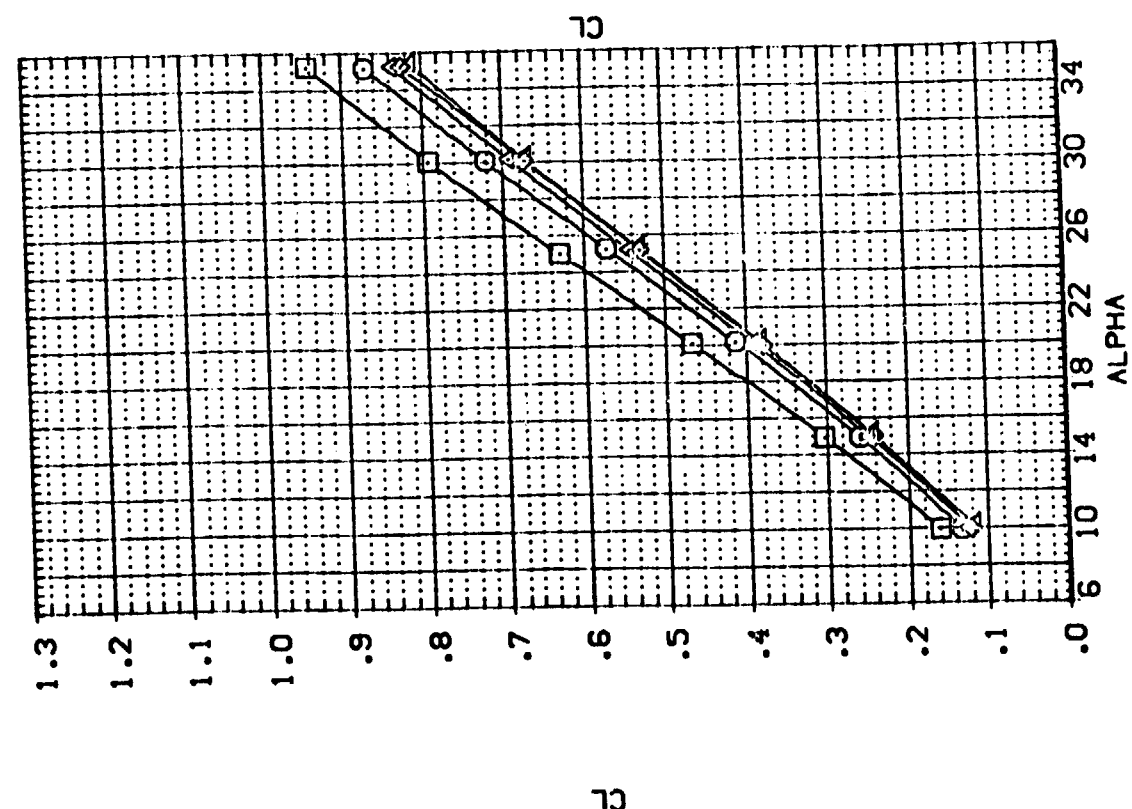
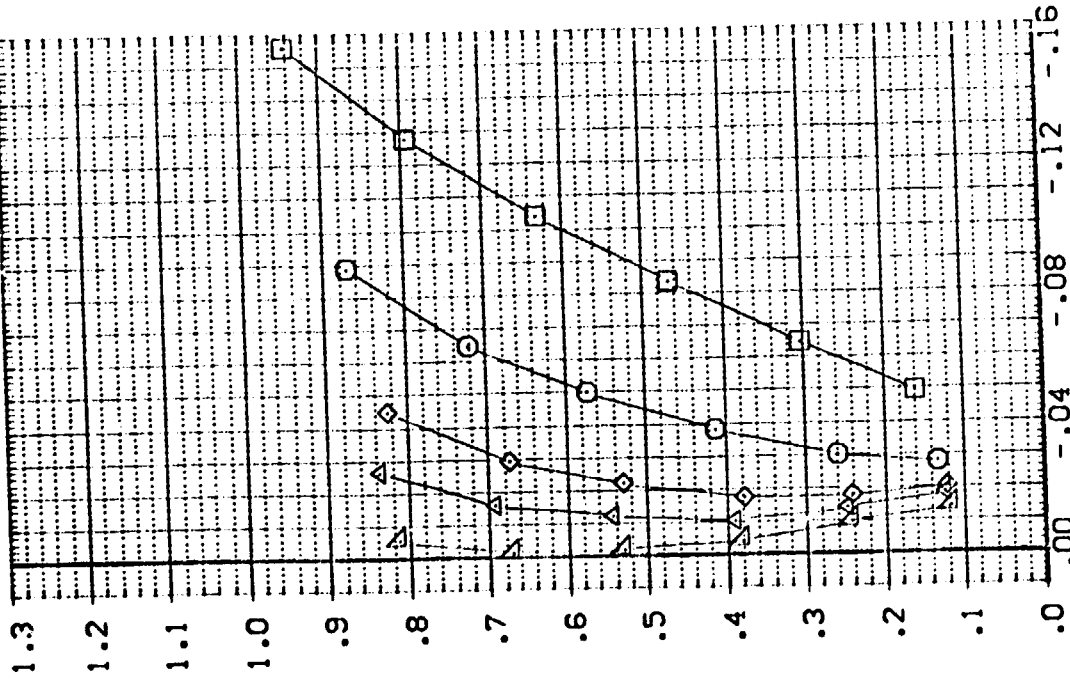
PAGE 11

(A)MACH = 10.30

DATA SET SYMBOL
 (RPO033)
 (RPO031)
 (RPO029)
 (RPO017)
 (RPO025)

CONFIGURATION DESCRIPTION
 LA-11.CHT SS.
 LA-11.CHT SS.
 LA-11.CHT SS.
 LA-11.CHT SS.
 LA-11.CHT SS.

REFERENCE INFORMATION
 SREF 21.7886
 XREF 3.5611
 YREF 7.0251
 XZPP 6.2802
 YZPP .0000
 ZZPP .0000
 SCALE .0075

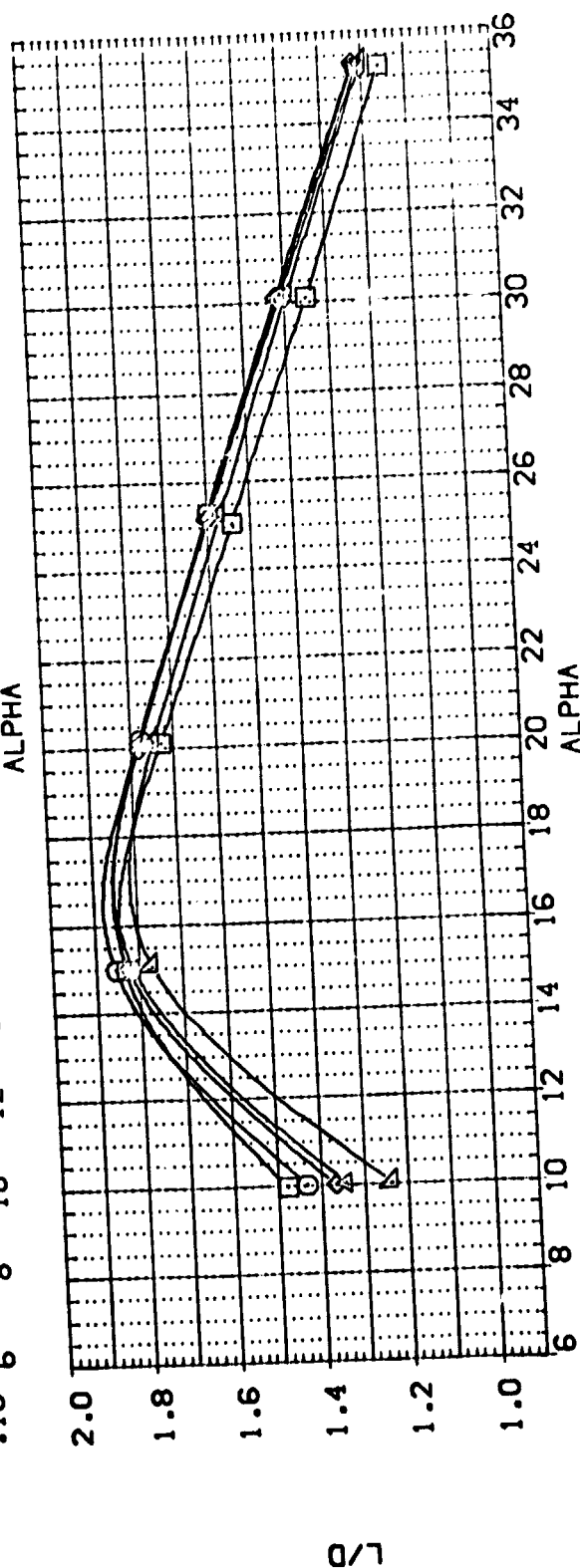
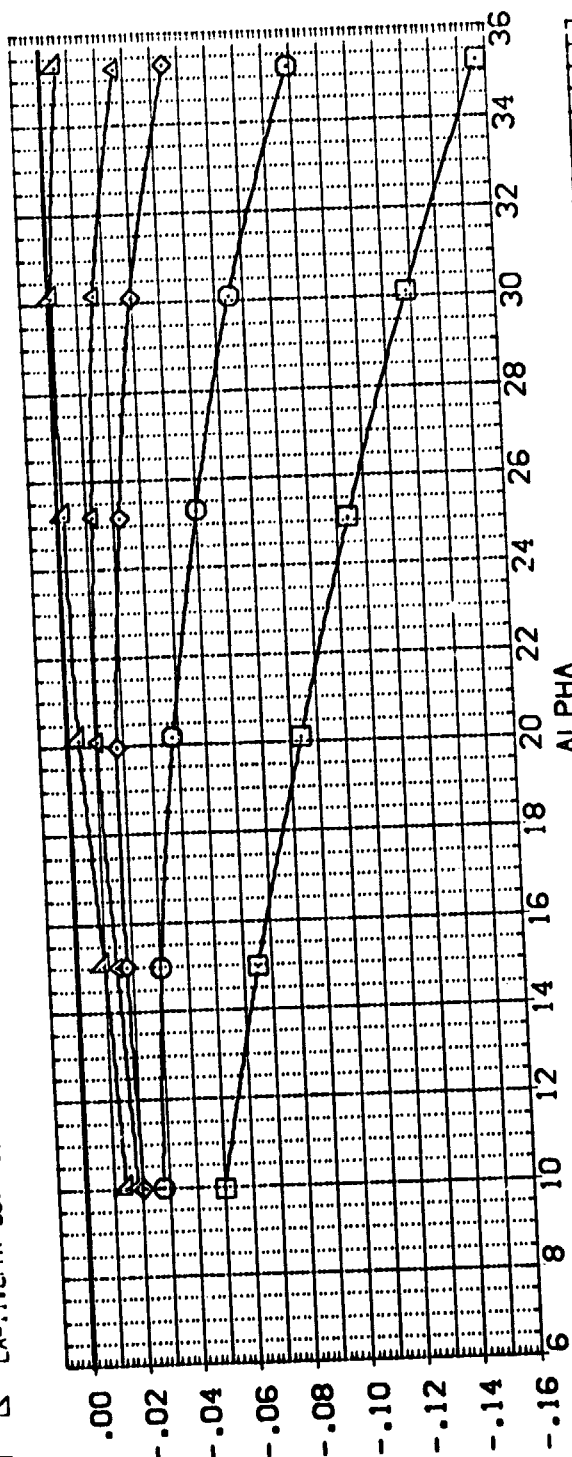


EFFECT OF ELEVATOR DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A)MACH = 10.30

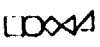


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVTR	AIRLON	BOFLAP	REFERENCE INFORMATION	SQ. IN.
(RP0033)	LA-11:CFHT 55: ROCKWELL CR8.	.000	10.000	.000	-14.250	SREF 21.7865	INCHES
(RP0001)	LA-11:CFHT 55: ROCKWELL CR8.	.000	.000	.000	-14.250	LREF 3.5611	INCHES
(RP0009)	LA-11:CFHT 55: ROCKWELL CR8.	.000	.000	.000	-14.250	BREF 7.0251	INCHES
(RP0017)	LA-11:CFHT 55: ROCKWELL CR8.	.000	-10.000	.000	-14.250	XREF 6.2802	INCHES
(RP0025)	LA-11:CFHT 55: ROCKWELL CR8.	.000	-20.000	.000	-14.250	YREF .0000	INCHES
		.000	-40.000	.000	-14.250	ZREF .0000	INCHES
						SCALE .0075	



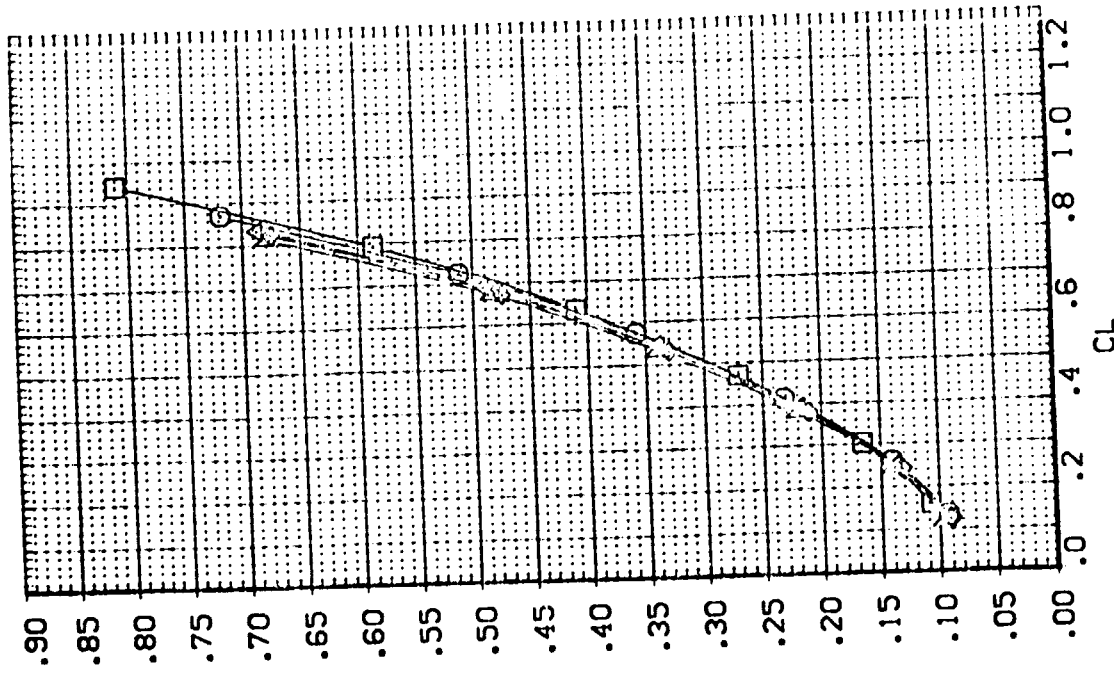
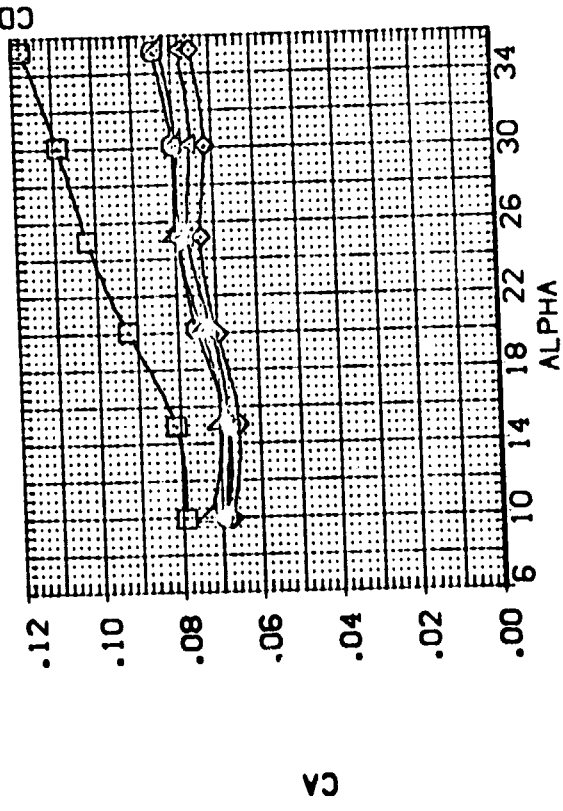
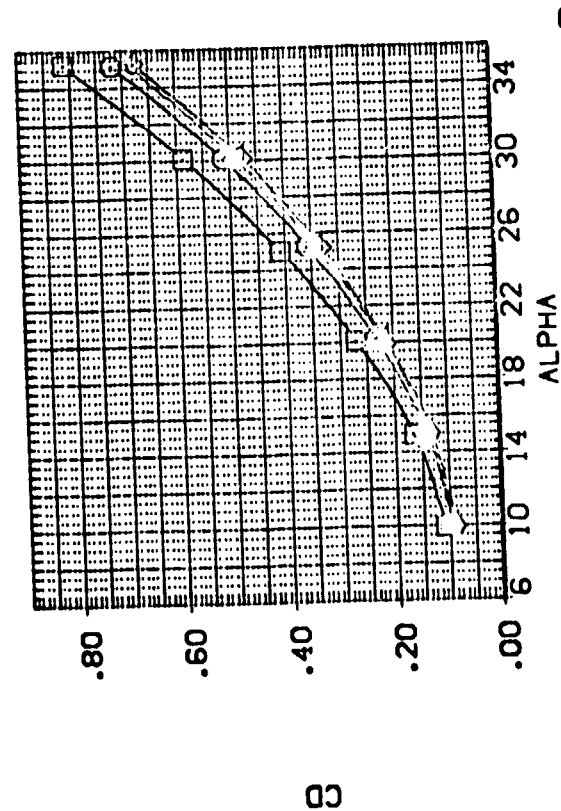
EFFECT OF ELEVATOR DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A) MACH = 10.30

DATA SET SY 80.  CONFIGURATION DESCRIPTION

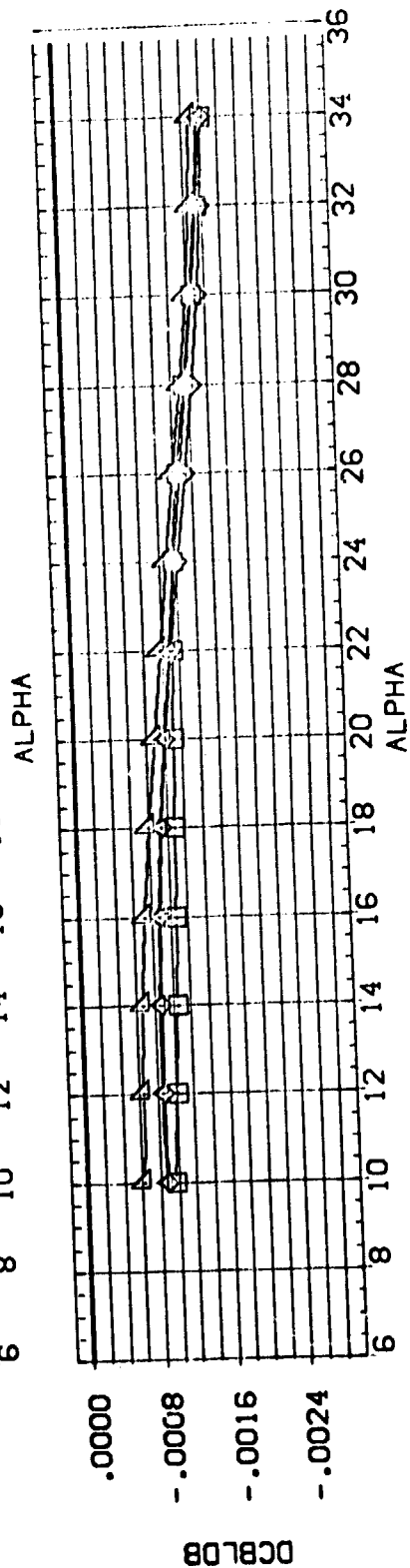
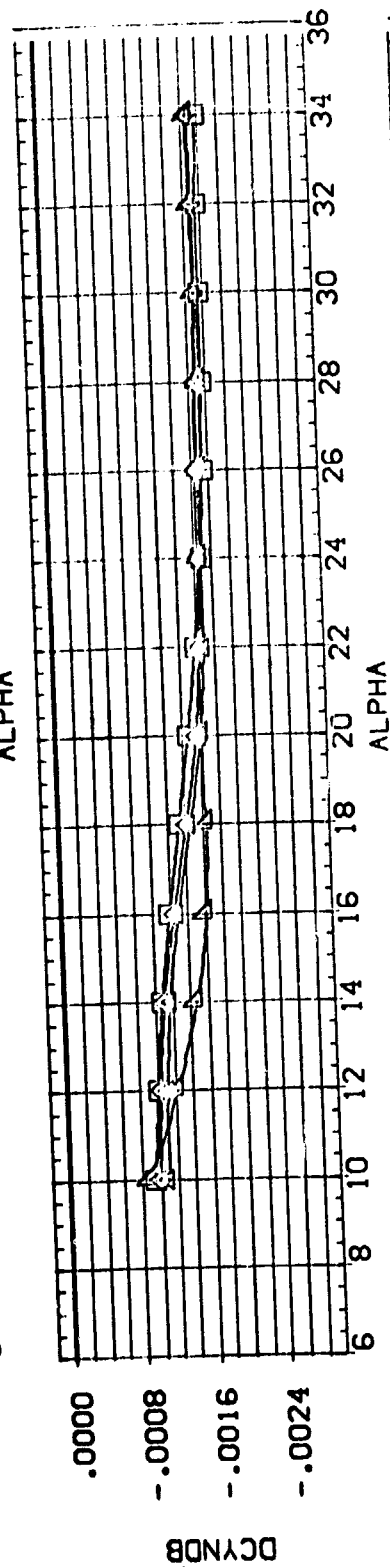
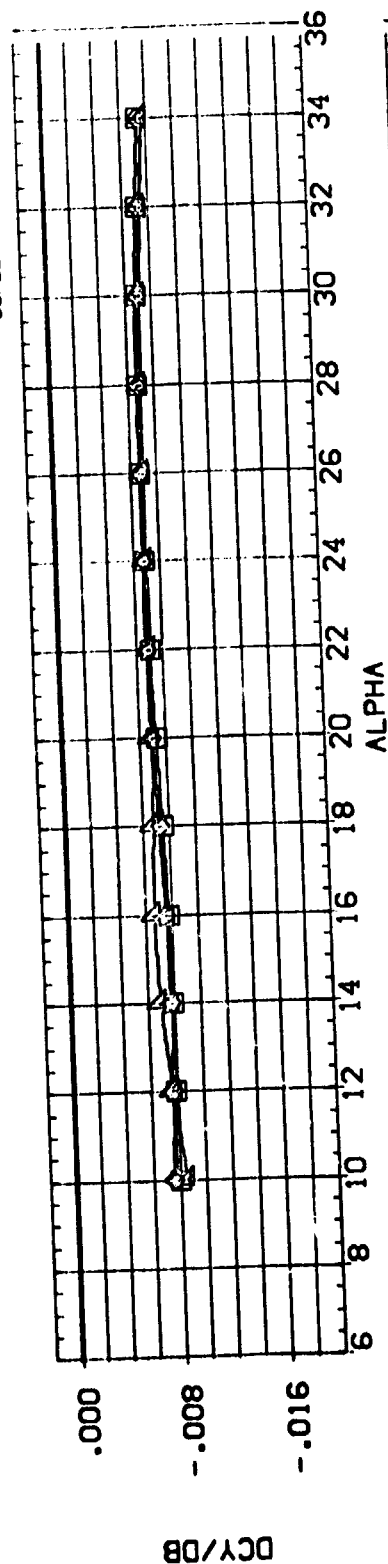
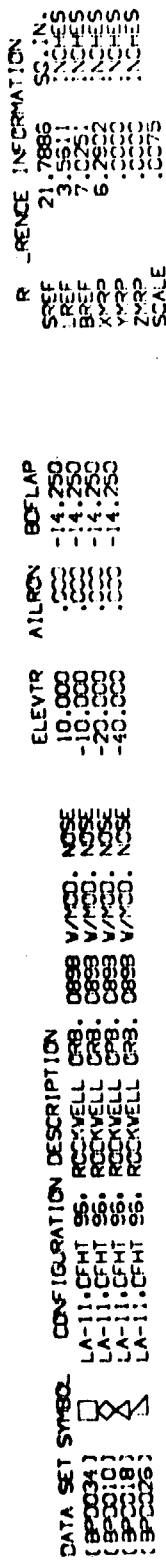
DATA SET SY 80.	CONFIGURATION DESCRIPTION	0898	V/MOD.	NOSE
[RP0003]	LA-11: CHT 96: ROCKWELL CR8.	0898	V/MOD.	NOSE
[RP0001]	LA-11: CHT 96: ROCKWELL CR8.	0898	V/MOD.	NOSE
[RP0009]	LA-11: CHT 96: ROCKWELL CR8.	0898	V/MOD.	NOSE
[RP0017]	LA-11: CHT 96: ROCKWELL CR8.	0898	V/MOD.	NOSE
[RP0025]	LA-11: CHT 96: ROCKWELL CR8.	0898	V/MOD.	NOSE

BETA: .000
ELEVTR: 10.000
AILRON: .000
BOFLAP: -14.250
SREF: 21.7885
LREF: 3.5611
BREF: 7.0251
XMRP: 6.2622
YMRP: .0000
ZMRP: .0000
SCALE: .0075



EFFECT OF ELEVATOR DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A) MACH = 10.30



EFFECT OF ELEVATOR DEFLECTION ON LAT.-DIRECTIONAL DERIVATIVES

CONCISE PATIENT DESCRIPTION

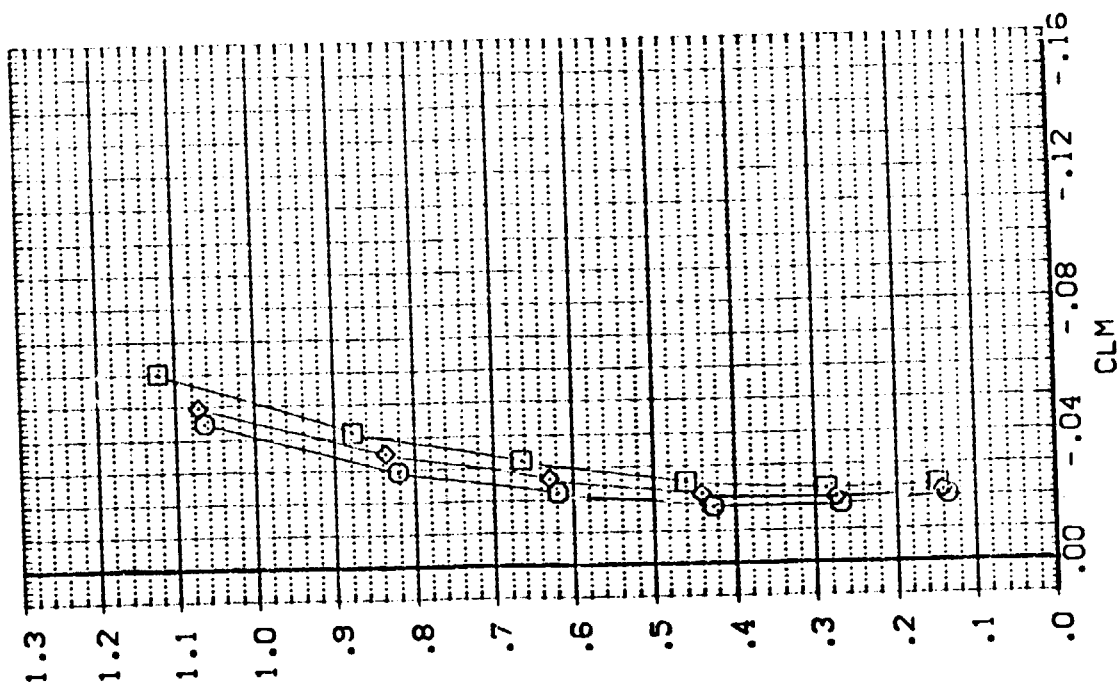
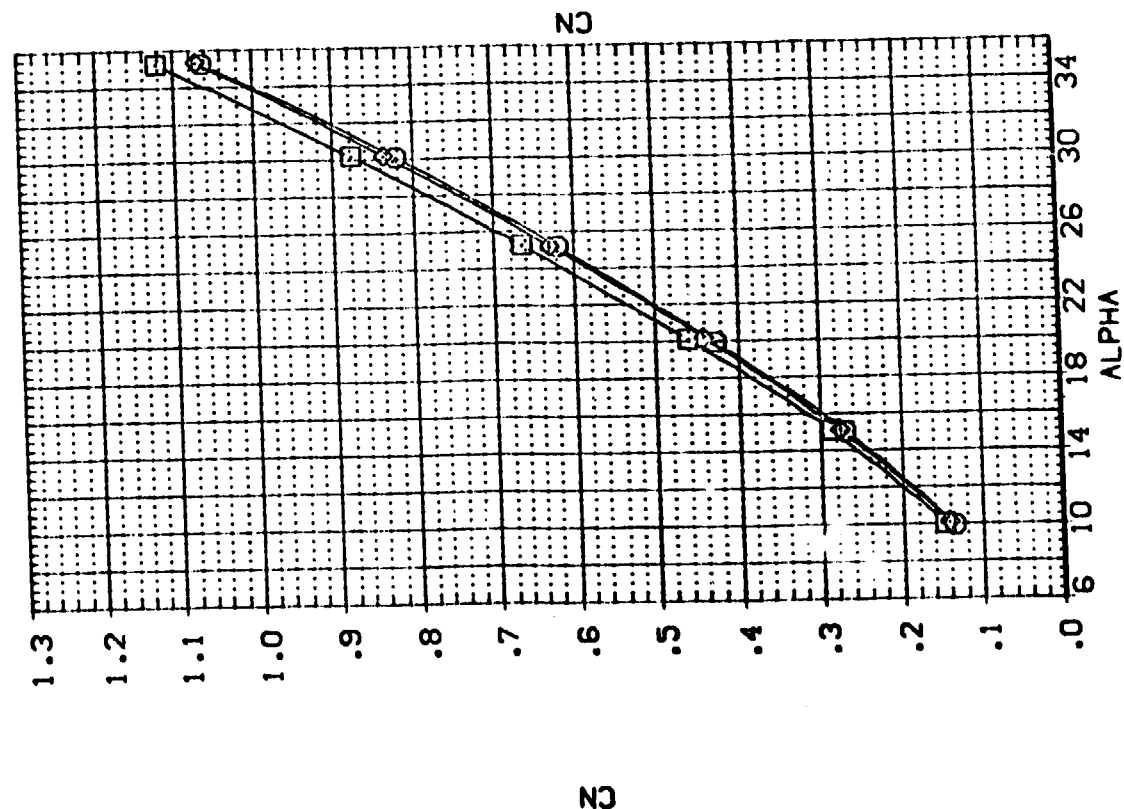
DATA SET SYMBOL

CONF	IGURATION	DESCRIPTION	Q398	V/MCD.	NOSE
LA-11	CFHT	96. ROCKWELL C93.	Q398	V/MCD.	NOSE
LA-11	CFHT	96. ROCKWELL C93.	Q399	V/MCD.	NOSE
LA-11	CFHT	96. ROCKWELL C93.	Q393	V/MCD.	NOSE

BOFLAP

REFERENCE INFORMATION:

REFERENCE INFORMATION		SG:IN:
SREF	21.7886	INCESS
LRFF	3.5611	INCESS
BRFF	7.0251	INCESS
XRRP	6.2602	INCESS
YRRP	0.0000	INCESS
ZRRP	0.0000	INCESS
SCALE	1.0075	INCESS



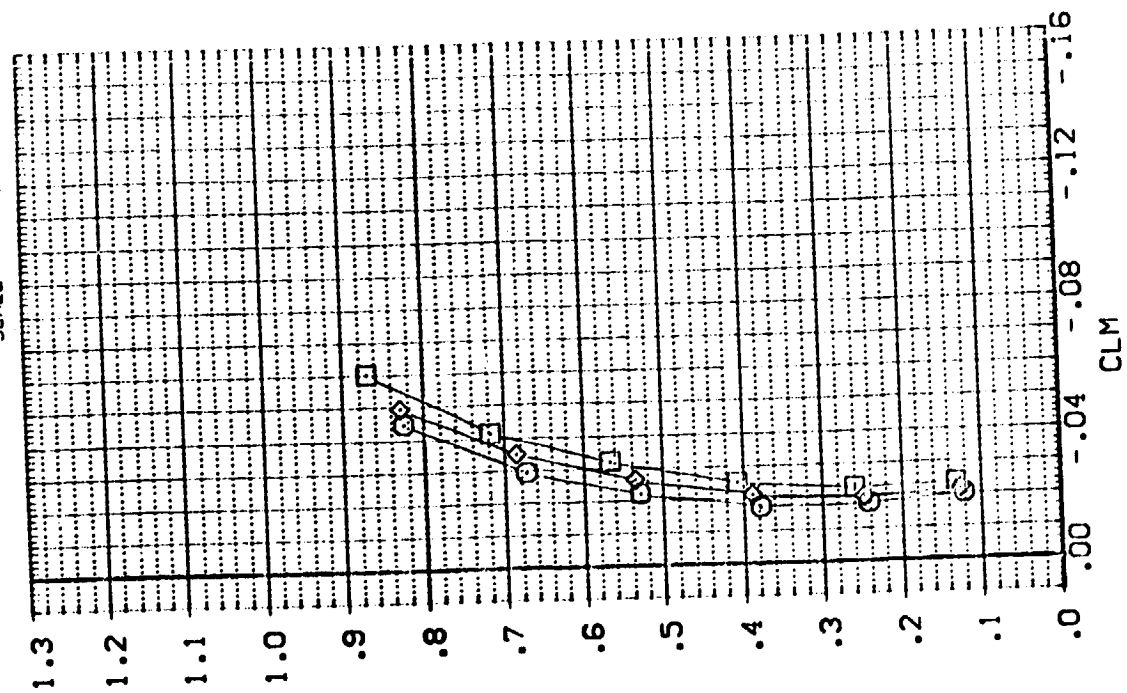
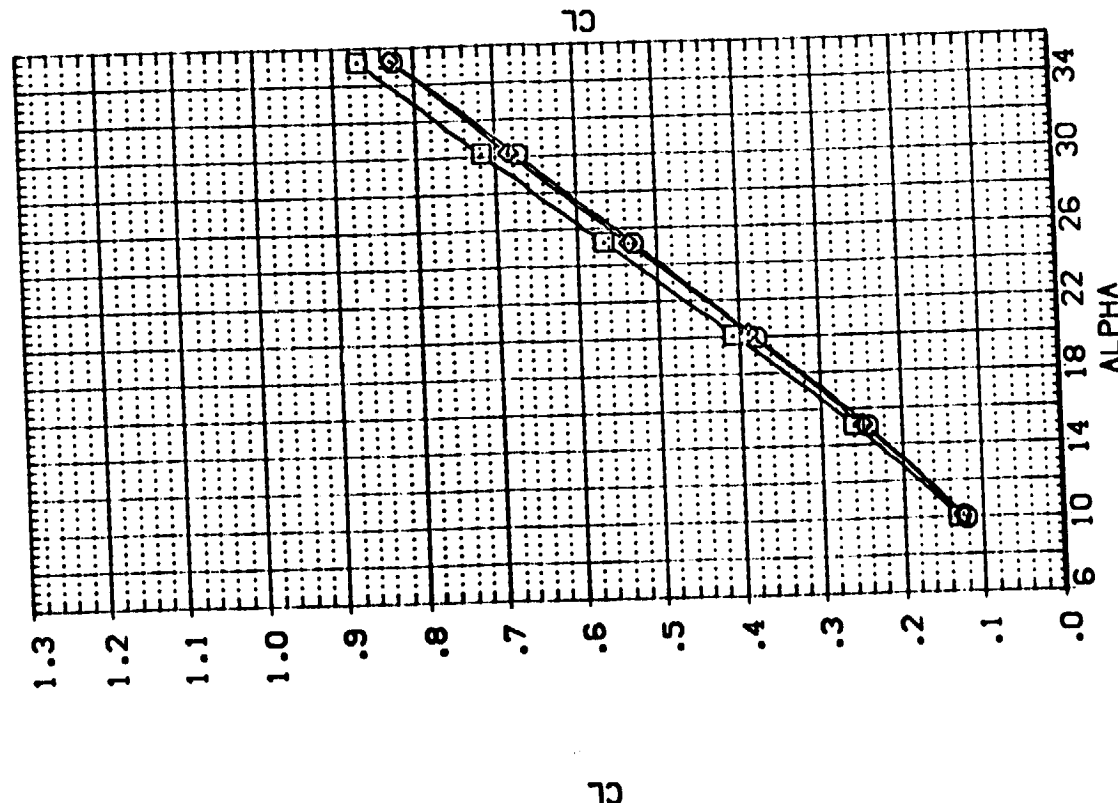
ALPHA EFFECT OF AILERON DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

CAMACH = 10.30



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RPO009) LA-11: CFHT 96: ROCKWELL CRB: 0898 V/MOD: NOSE
 (RPO011) LA-11: CFHT 96: ROCKWELL CRB: 0898 V/MOD: NOSE
 (RPO049) LA-11: CFHT 96: ROCKWELL CRB: 0898 V/MOD: NOSE

BETA ELEVTR AILRON BDFLAP REFERENCE INFORMATION SQ. IN.
 .000 -10.000 .000 -14.250 SREF 21.7886 NOSES
 .000 -10.000 .000 -14.250 LREF 3.5511 NOSES
 .000 -10.000 .000 -14.250 BREF 7.0251 NOSES
 .000 -10.000 .000 -14.250 XMRP 6.2802 NOSES
 .000 -10.000 .000 -14.250 YMRP .0000 NOSES
 .000 -10.000 .000 -14.250 ZMRP .0000 NOSES
 .000 -10.000 .000 -14.250 SCALE .0075 NOSES



EFFECT OF AILERON DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A)MACH = 10.30

DATA SET SYMBOL: **Q** **Q** **Q**

CONFIGURATION DESCRIPTION

LA-11: CFHT 55: ROCKWELL CR8. D855 V/MCD. NOSE

LA-11: CFHT 55: ROCKWELL CR8. D855 V/MCD. NOSE

LA-11: CFHT 55: ROCKWELL CR8. D855 V/MCD. NOSE

LA-11: CFHT 55: ROCKWELL CR8. D855 V/MCD. NOSE

REFERENCE INFORMATION

SREF 21.7885

LREF 3.561

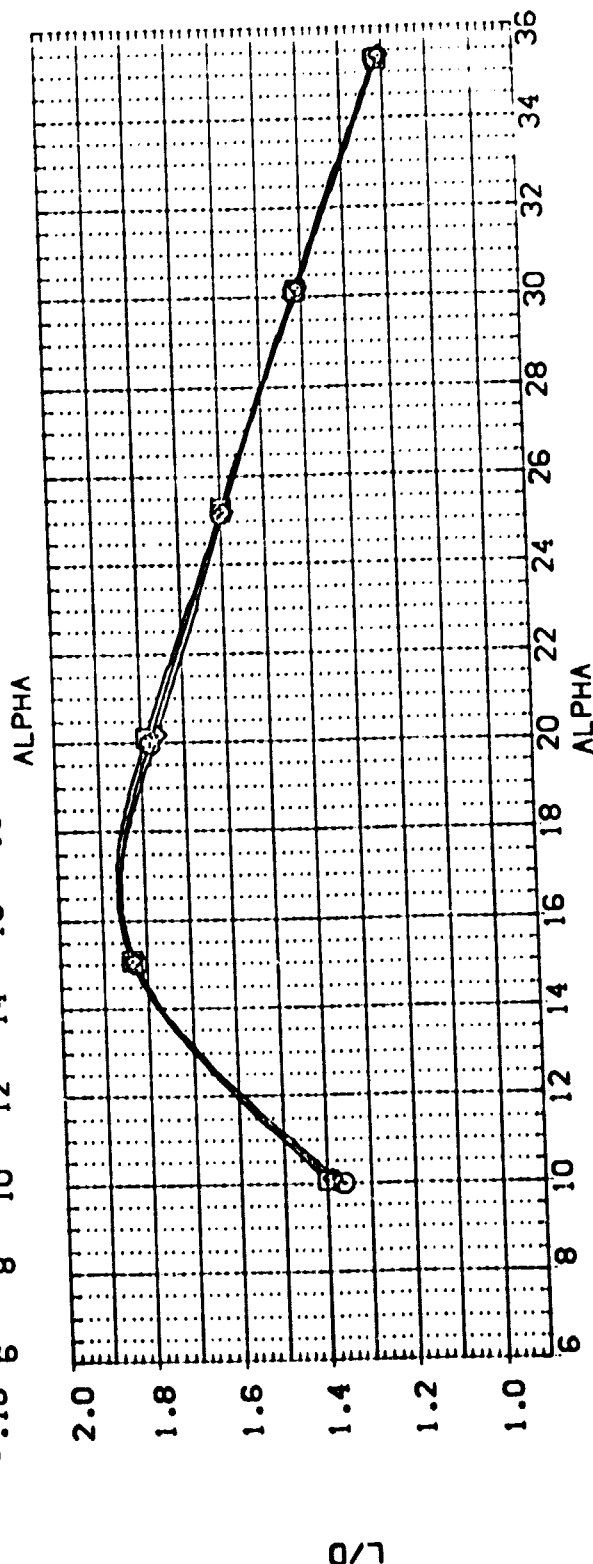
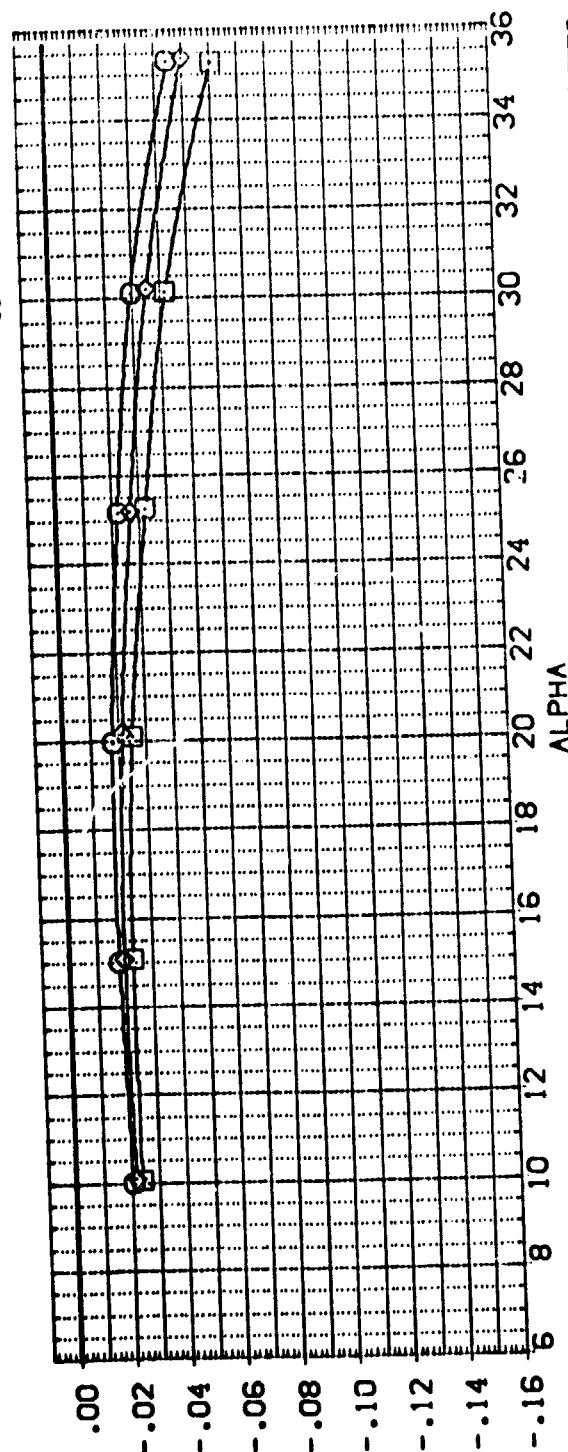
BREF 7.025

XMRP 5.2322

YMRP .0000

ZMRP .0000

SCALE .0075



EFFECT OF AILERON DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A)MACH = 10.30

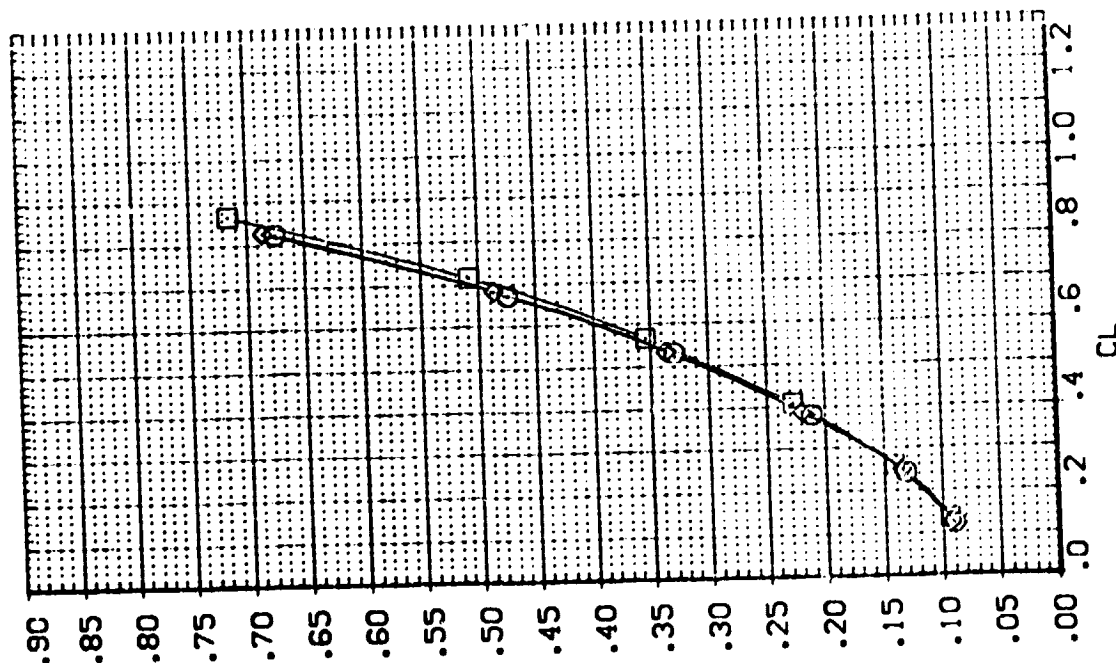
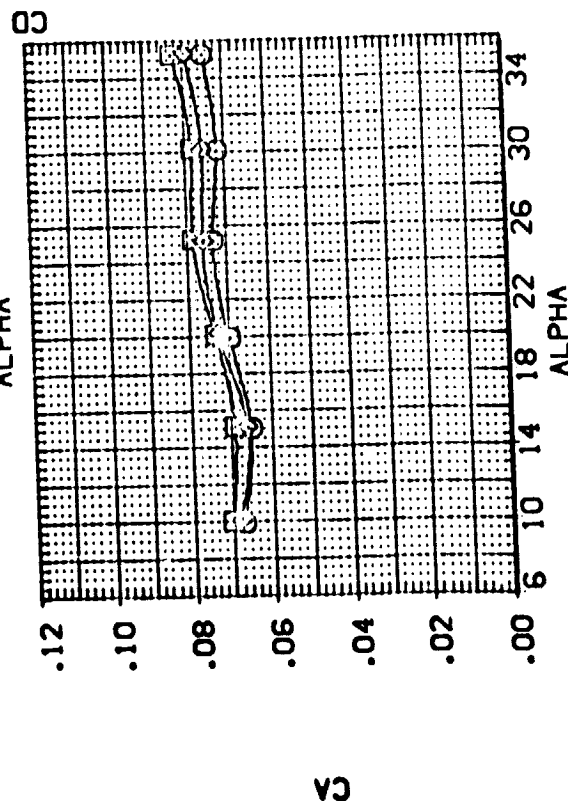
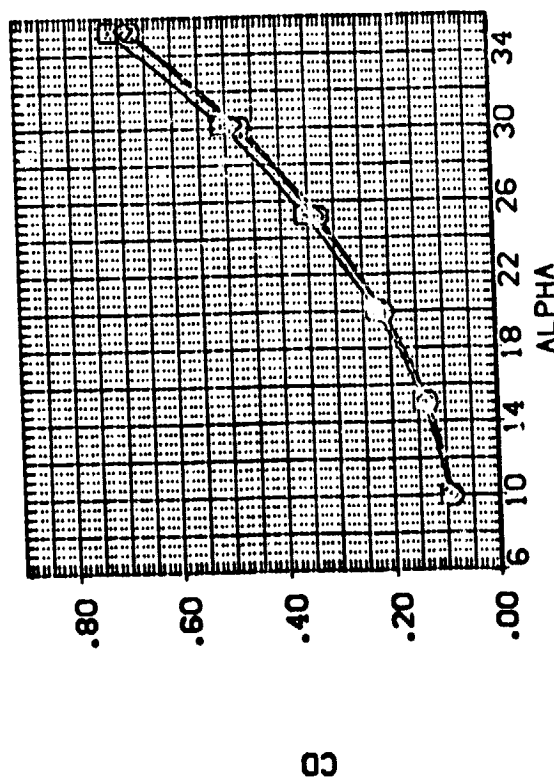


DATA SET SYMBOL
(RP0008)
(RP0041)
(RP0049)

CONFIGURATION DESCRIPTION
LA-111-CFHT 55. ROCKWELL CFB. 0898 V/MCO. NOSE
LA-111-CFHT 55. ROCKWELL CFB. 0899 V/MCO. NOSE
LA-111-CFHT 55. ROCKWELL CFB. 0899 V/MCO. NOSE

BETA ELEVTR AILRON BOFLAP
.000 -10.000 .000 -14.250
.000 -10.000 .000 -14.250
.000 -10.000 .000 -14.250

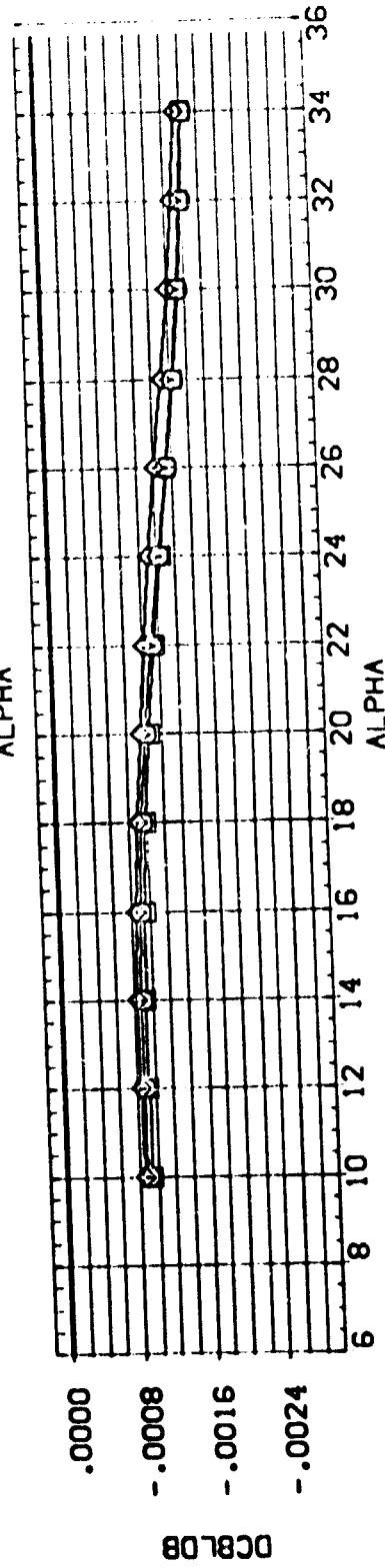
REFERENCE INFORMATION
SREF 21.7886 SQ.IN.
LREF 3.561 NOSES
BREF 7.075 NOSES
XREF 6.2502 NOSES
YREF .0000 NOSES
ZREF .0000 NOSES
SCALE .0075



EFFECT OF AILERON DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A) MACH = 10.30

SPEC	21.786	SC IN.
LREF	3.561	ZCIES
SPEC	7.025	ZCIES
XZP	6	ZCIES
XZP	.282	ZCIES
XZP	.000	ZCIES
XZP	.000	ZCIES
SCALE	.003	ZCIES

PAGE
..()



DATA SET SYMBOL: (RPO001) (RPO0073)
 CONFIGURATION DESCRIPTION: 0883 V/MOD. NOSE
 0883 V/MOD. NOSE
 0883 V/MOD. NOSE

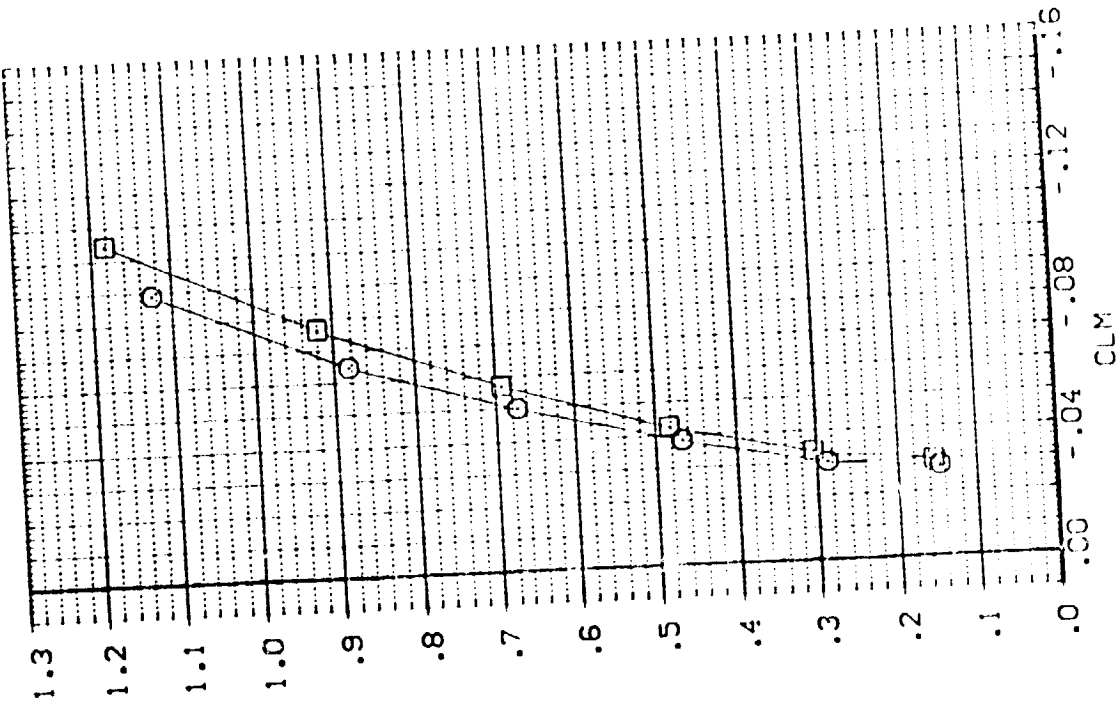
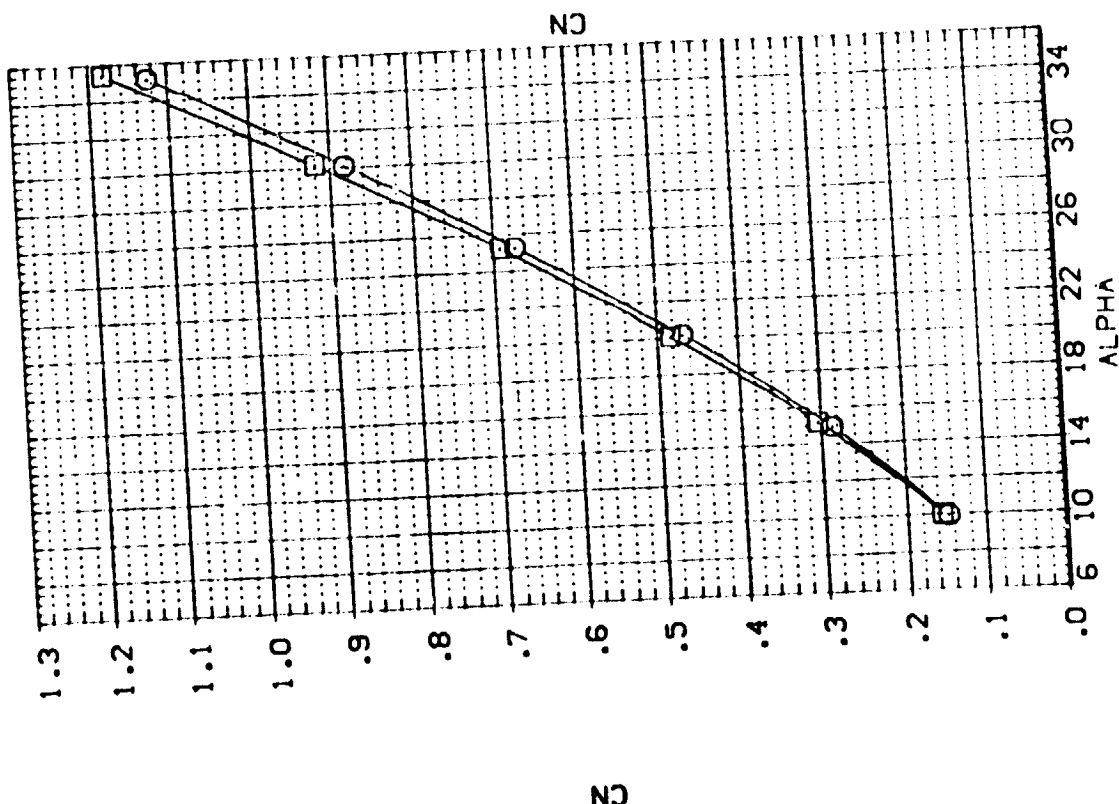
BETA: 0.000
 0.000
 0.000

ELEV: 0.000
 0.000
 0.000

AIRCN: 0.000
 0.000
 0.000

BOFLAP: -14.250
 0.000
 0.000

REFERENCE INFORMATION:
 SREF: 21.7885
 LREF: 3.5811
 BREF: 1.0226
 VREF: 6.0000
 WREF: 0.0000
 SCALE: 0.0000

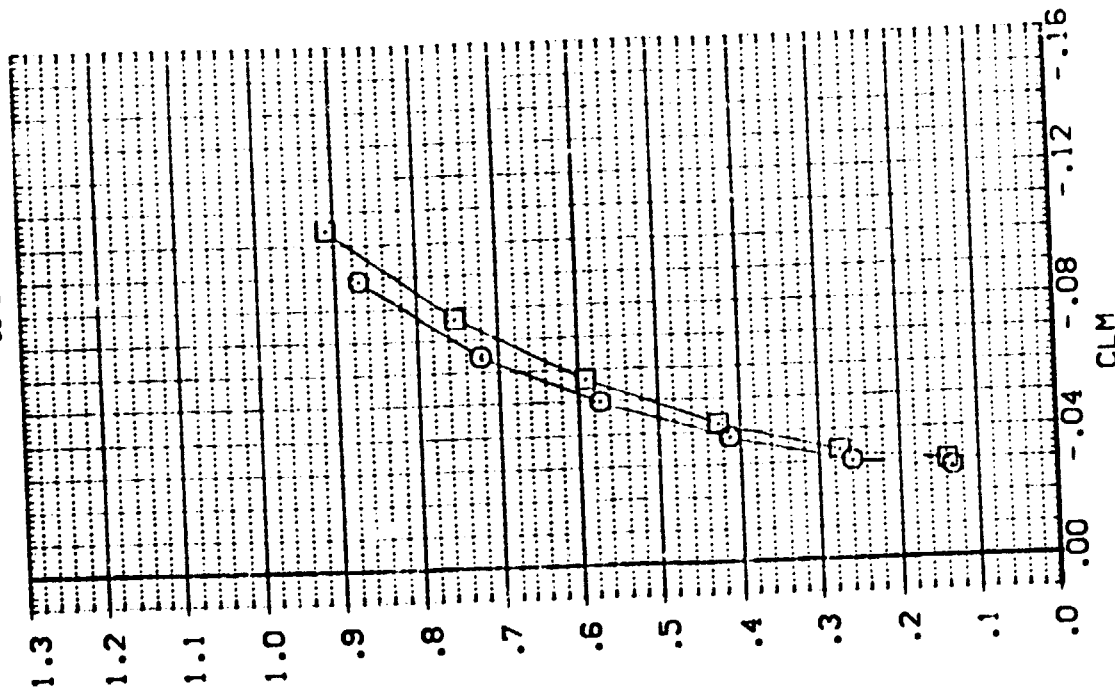
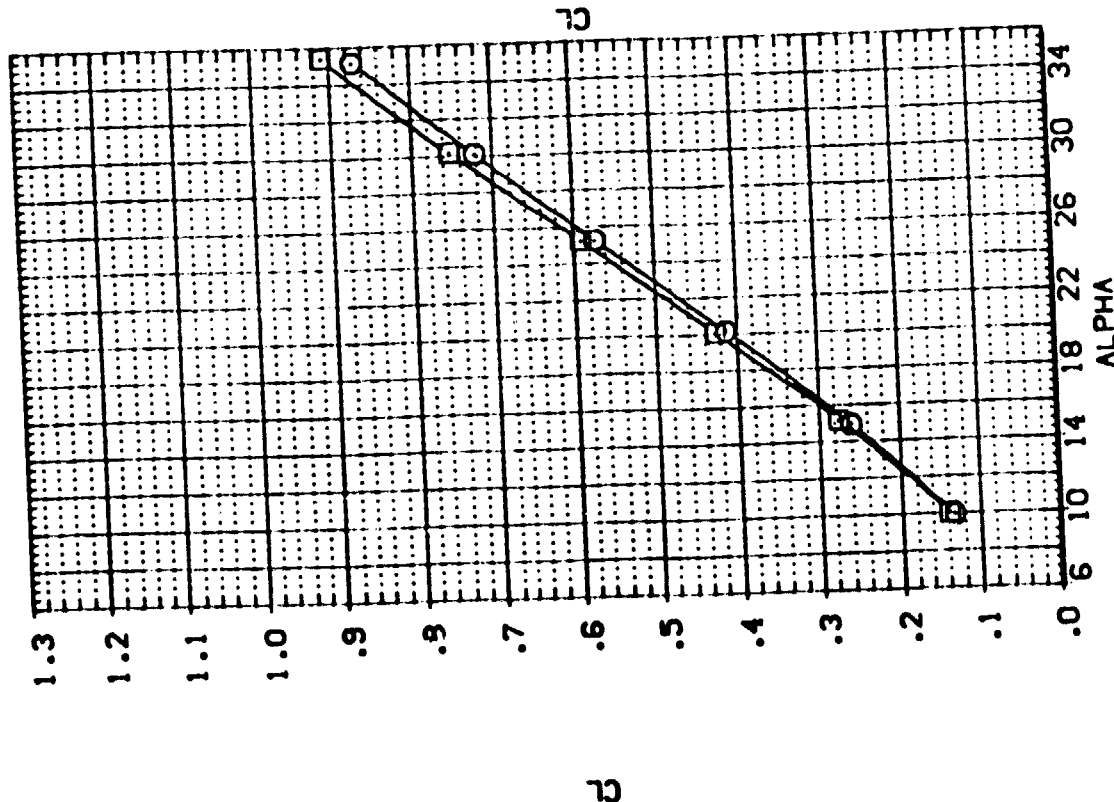


EFFECT OF BODY FLAP DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A)MACH = 0.30

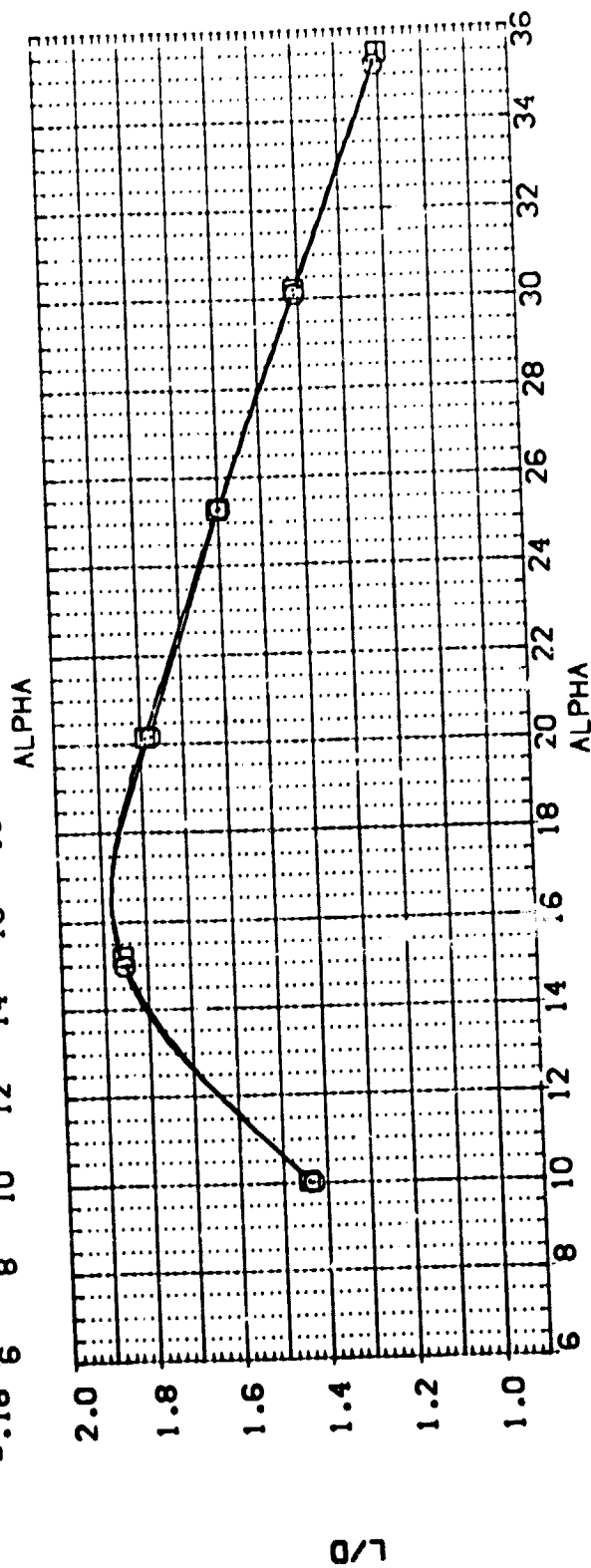
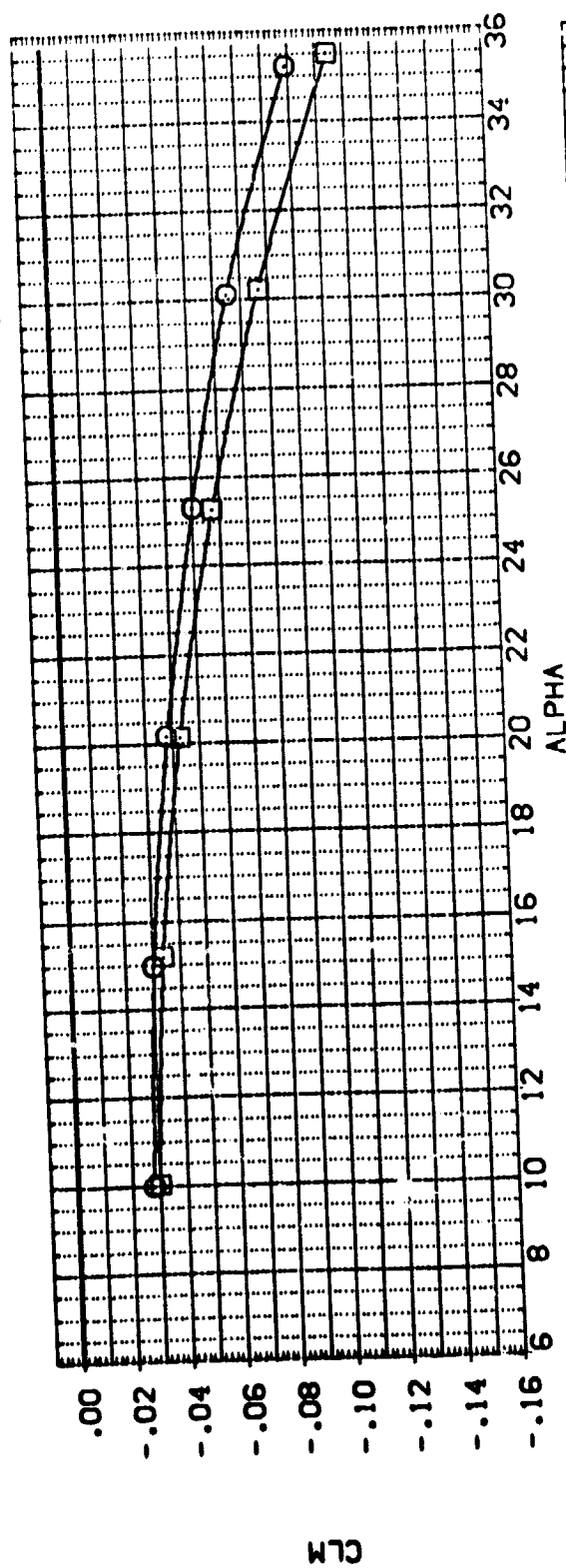
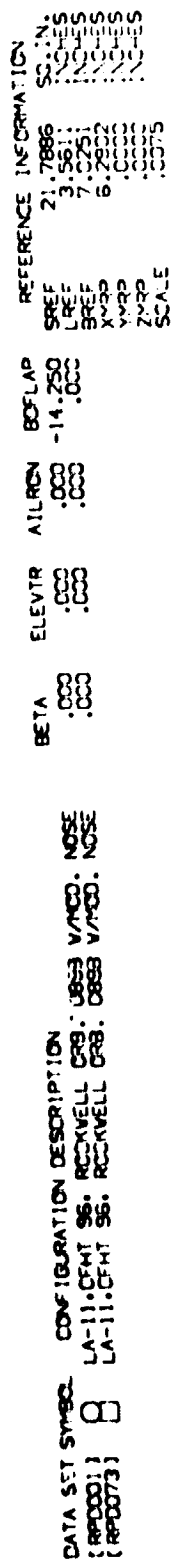
DATA SET SYMBOL [RP0001] [RP0073] CONFIGURATION DESCRIPTION LA-11: CFMT 96: ROCKWELL DRS: 0899 V/MOD: NOSE LA-11: CFMT 96: ROCKWELL DRS: 0899 V/MOD: NOSE

BETA .000 ELEVTR .000 AIRCON .000 BOFLAP -14.250 SREF 21.7886 SCALIN 50.0155
 .000 .000 .000 .000 LREF 3.5611 SCALIN 22.0155
 .000 .000 .000 .000 BREF 7.0251 SCALIN 22.0155
 .000 .000 .000 .000 XREF 6.2672 SCALIN 22.0155
 .000 .000 .000 .000 YREF .0000 SCALIN 22.0155
 .000 .000 .000 .000 ZREF .0000 SCALIN 22.0155
 .000 .000 .000 .000 SCALE .0075



EFFECT OF BODY FLAP DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A) MACH = 10.30



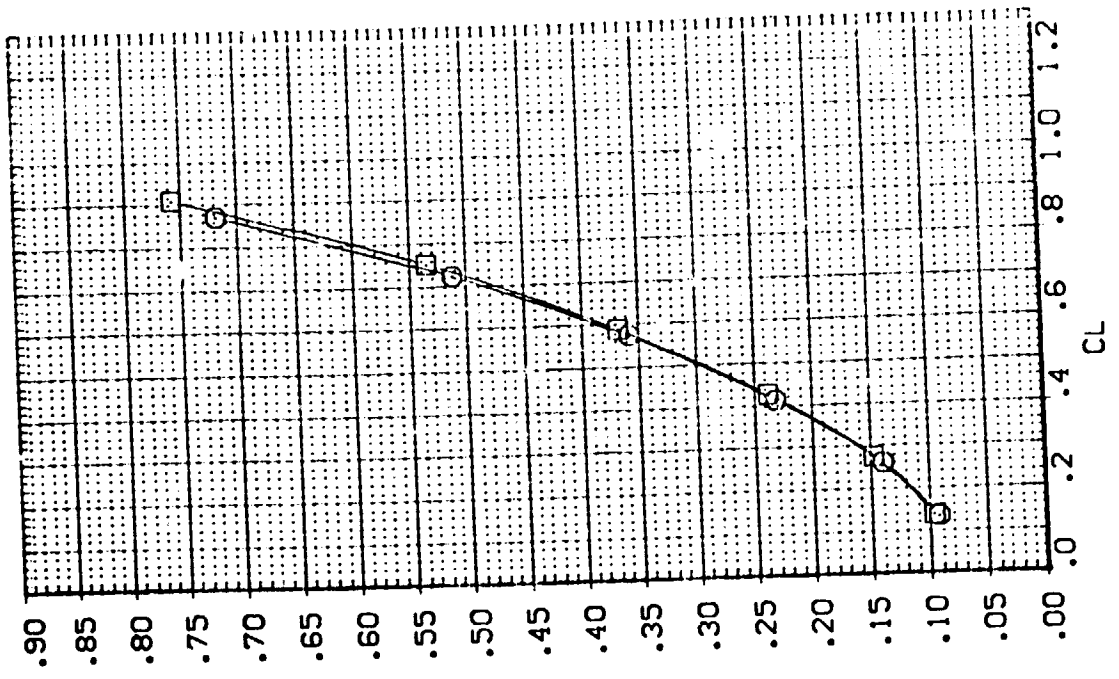
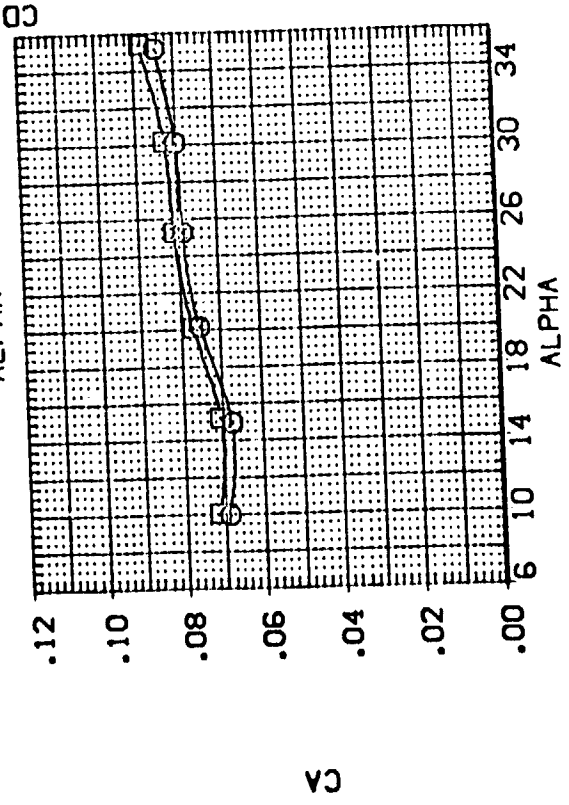
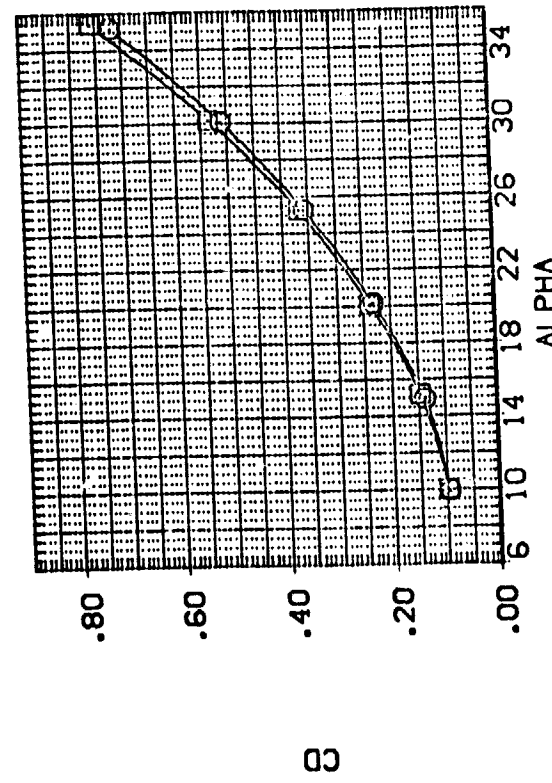
CHARACTERISTICS OF LONGITUDINAL DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

PAGE 3

(A)MACH = 10.30

DATA SET SYMBOL: []
 CONFIGURATION DESCRIPTION: LA-11: CHT 98; ROCKWELL C98; 0898 V/MOD; NOSE
 LA-11: CHT 98; ROCKWELL C98; 0898 V/MOD; NOSE

BETA: .000
 ELEVTR: .000
 AILRON: .000
 BOFLAP: -14.25C
 REFERENCE INFORMATION:
 SREF: 21.7886
 LREF: 3.561
 BREF: 7.000
 YMRP: 6.200
 ZMRP: .000
 SCALE: .0075



EFFECT OF BODY FLAP DEFLECTION ON BASIC LONGITUDINAL CHARACTERISTICS

(A)MACH = 10.30



DATA SET SYMBOL: (B70041) (B70049)

CONFIGURATION DESCRIPTION: LA-11, CFHT 96, ROCKWELL CRG, 0899 V/MCD, NOSE; LA-11, CFHT 96, ROCKWELL CRG, 0899 V/MCD, NOSE

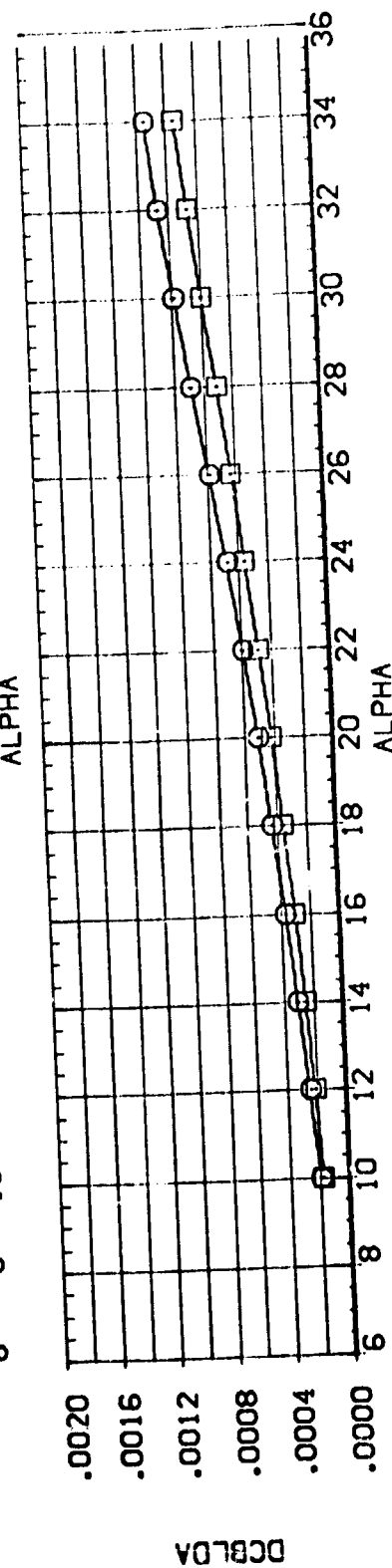
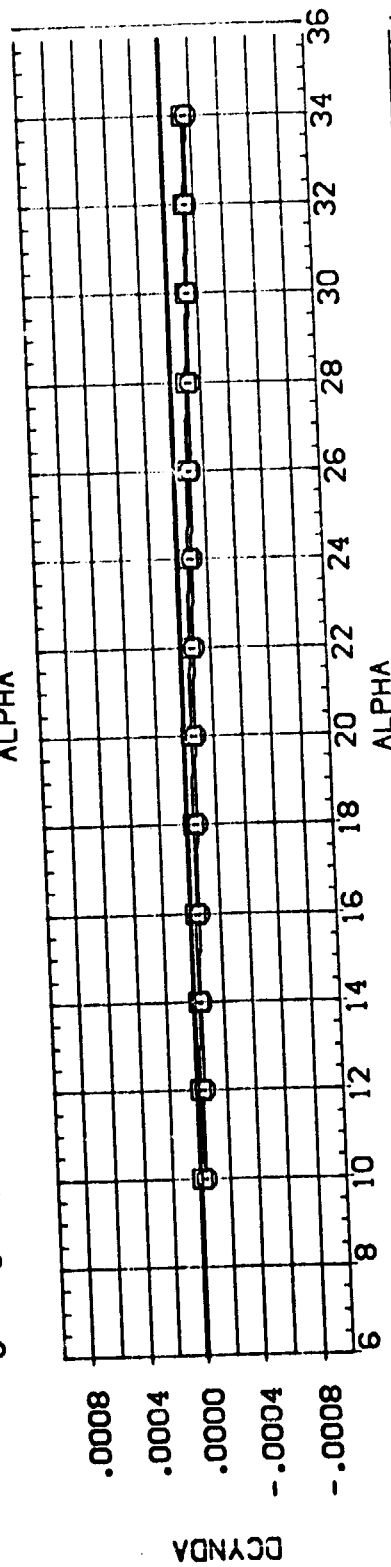
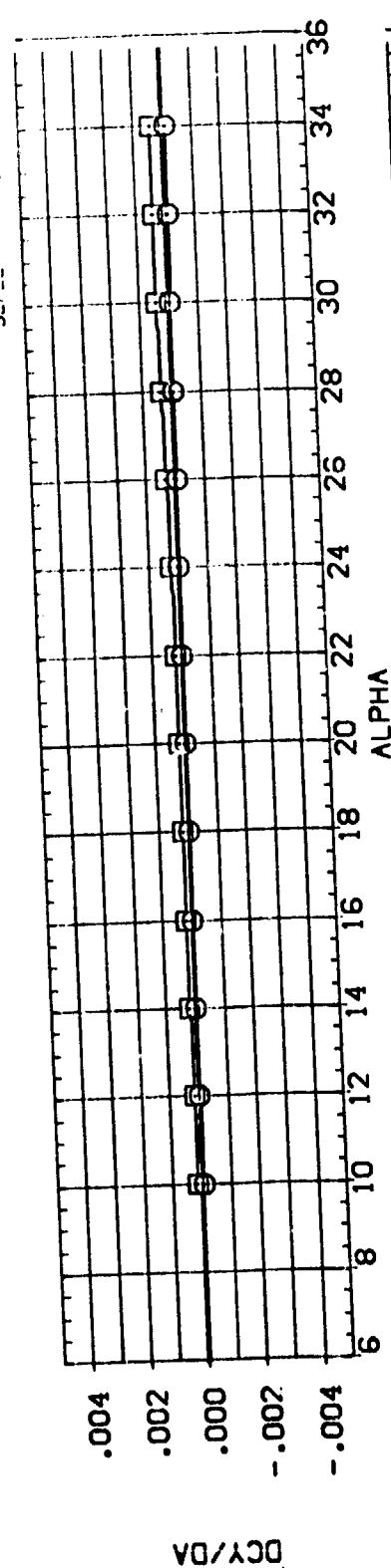
BETA: .000, .000

DELTA IN: 10.000, 10.000

ELEVTR: -10.000, -10.000

BOFLAP: -14.250, -14.250

REFERENCE INFORMATION: SQ. IN. 21.7866; INCHES 3.5611; INCHES 7.0251; INCHES 6.2832; INCHES .0000; INCHES .0000; INCHES .0075; SCALE



COMPARISON OF AILERON DERIVATIVES FOR OPPOSITE CONTROL DEFLECTION

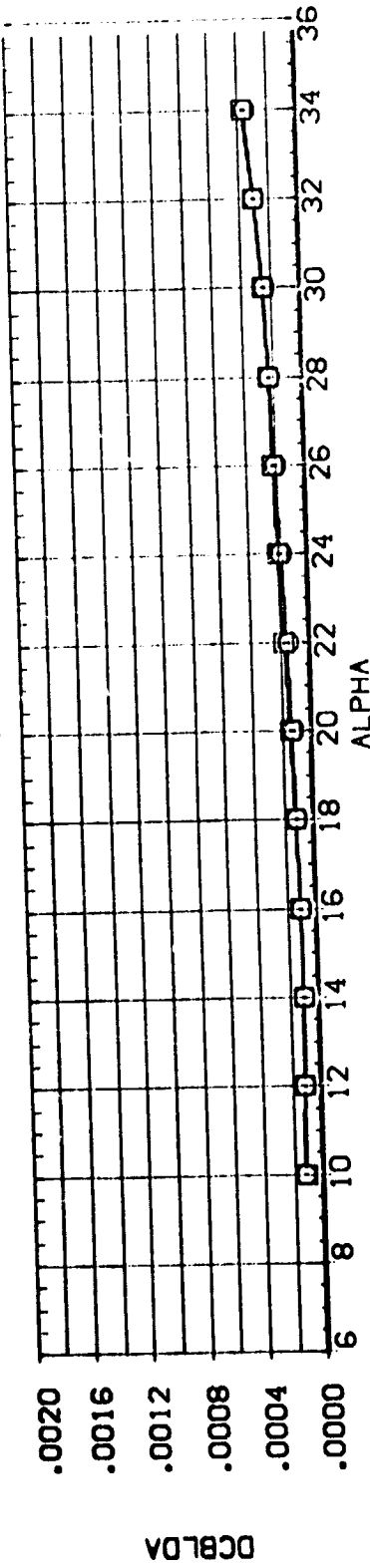
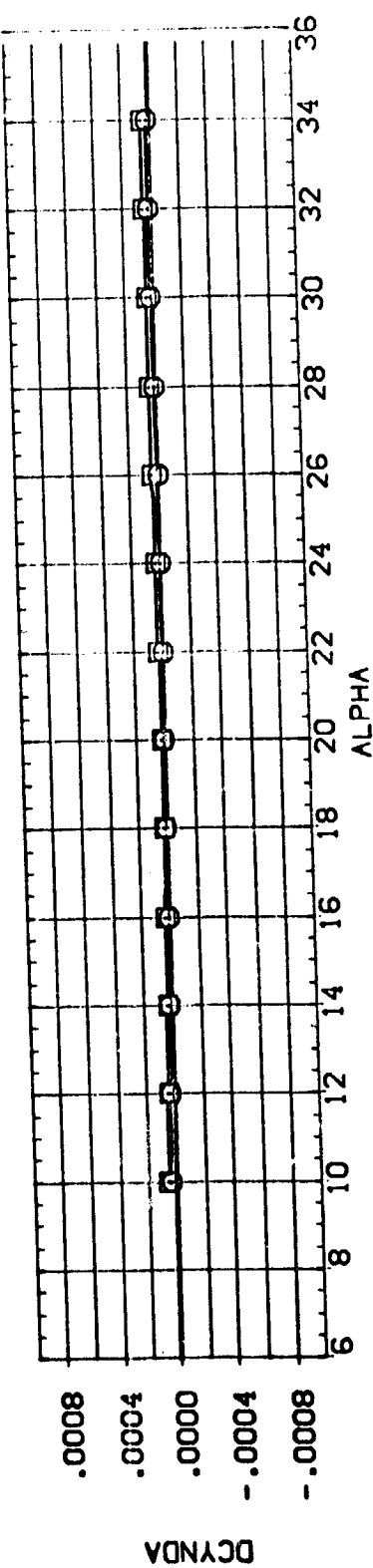
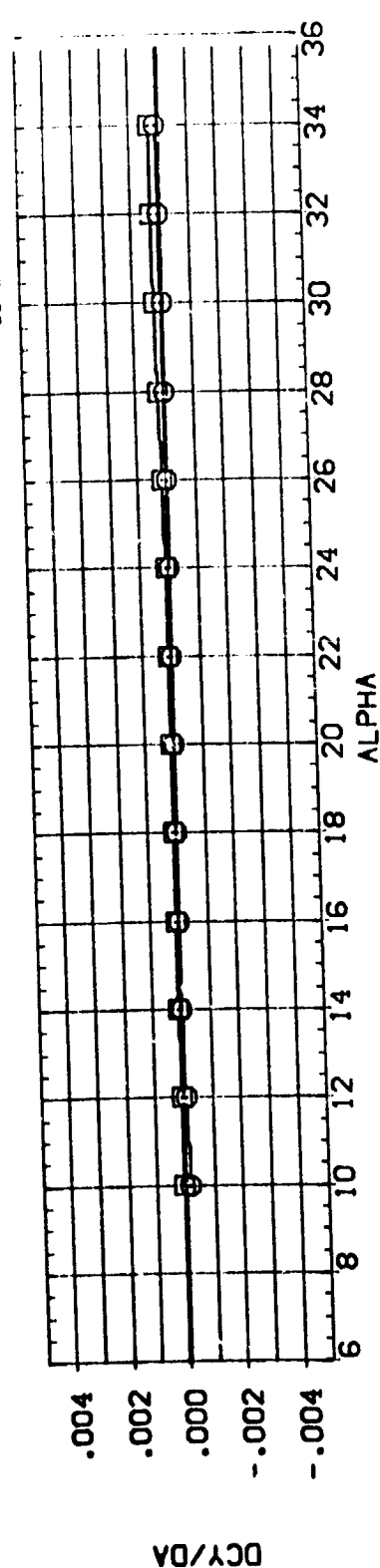
(A) MACH = 10.30

DATA SET SYMBOL: (BPD065) (BPD057)

CONFIGURATION DESCRIPTION: LA-11.05 FT 96. ROCKWELL CRB. D888 V/MOC. NOSE
LA-11.05 FT 96. ROCKWELL CRB. D888 V/MOC. NOSE

BETA: .000
D-TAIL: 10.000
ELEVTR: -30.000
BOELAP: -14.250

REFERENCE INFORMATION: SREF: 21.7885
LREF: 3.5611
XREF: 7.0251
YMRP: 6.2602
ZMRP: .0000
SCALE: .0075



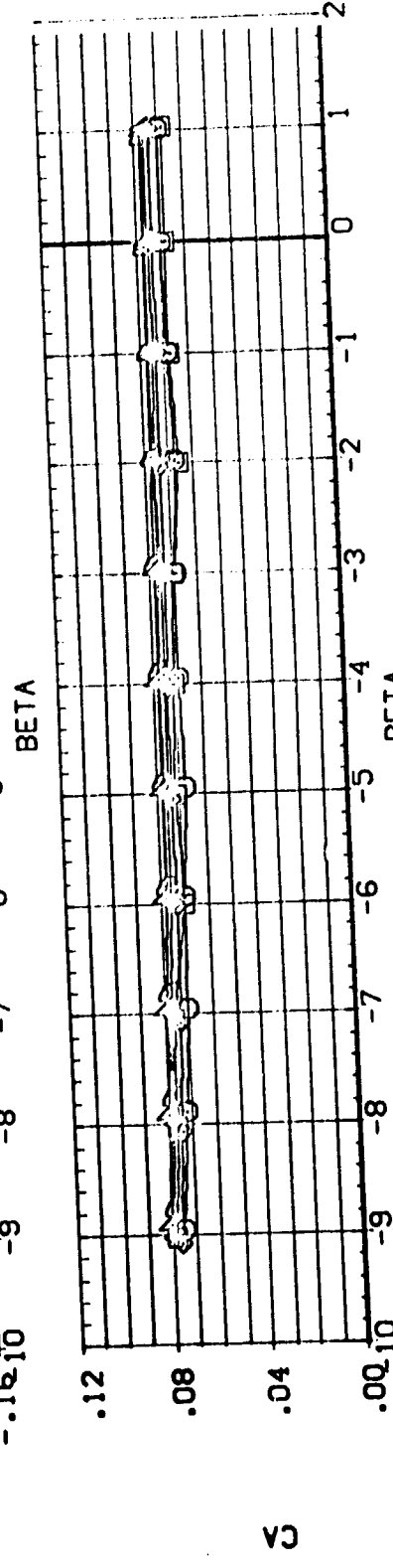
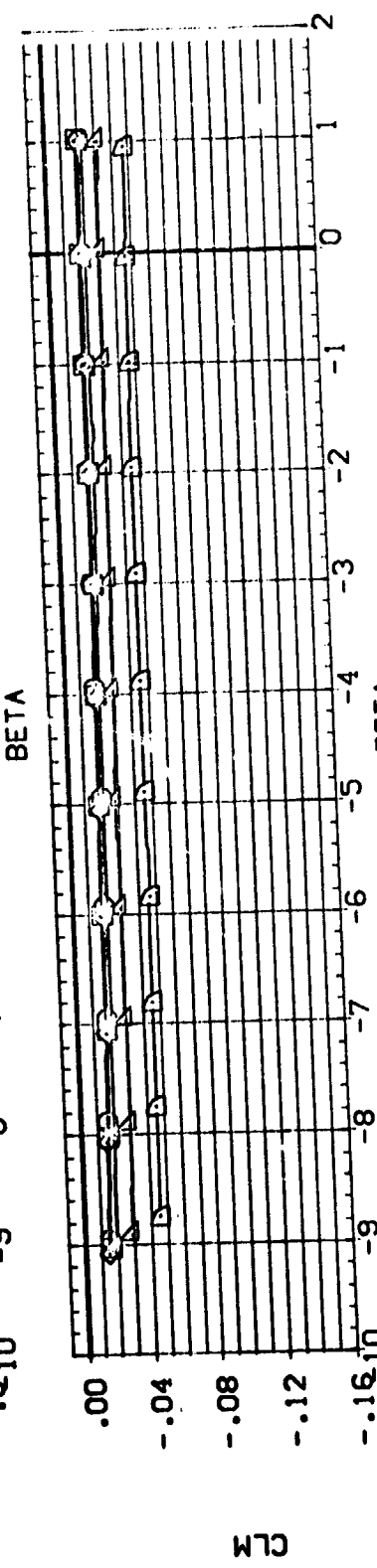
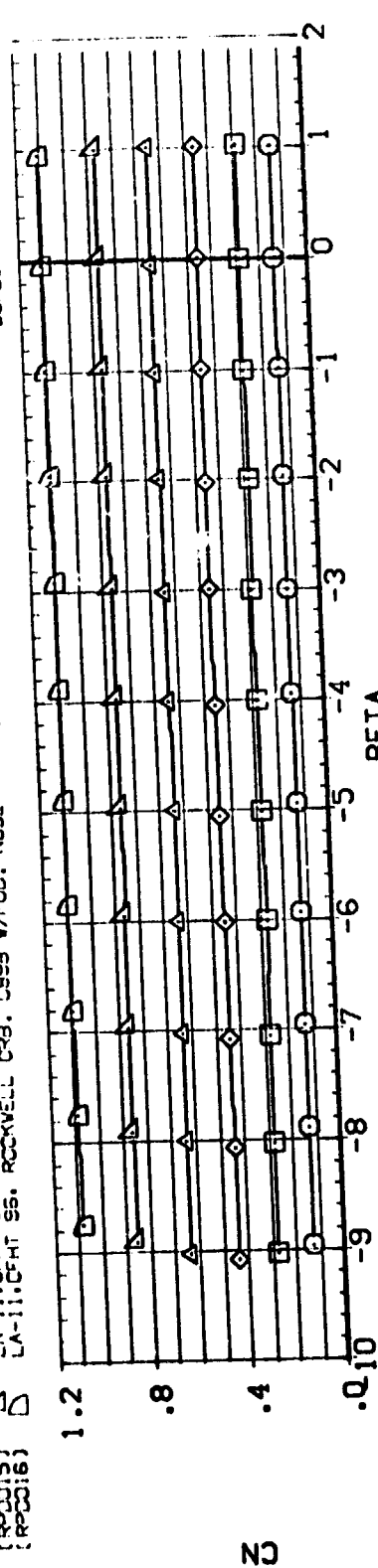
COMPARISON OF AILERON DERIVATIVES FOR OPPOSITE CONTROL DEFLECTION

PAGE : 6

(A)MACH = 10.30



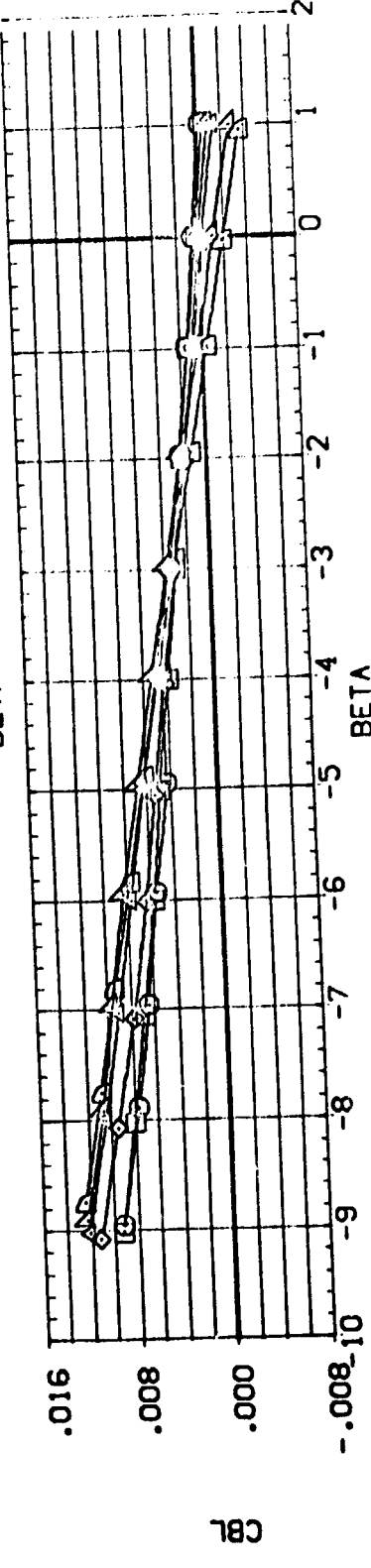
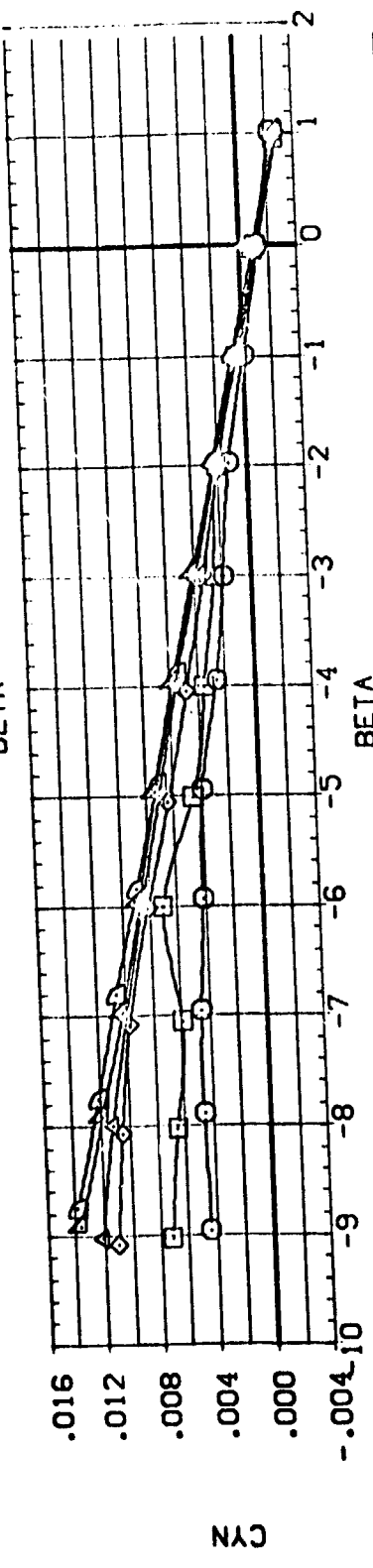
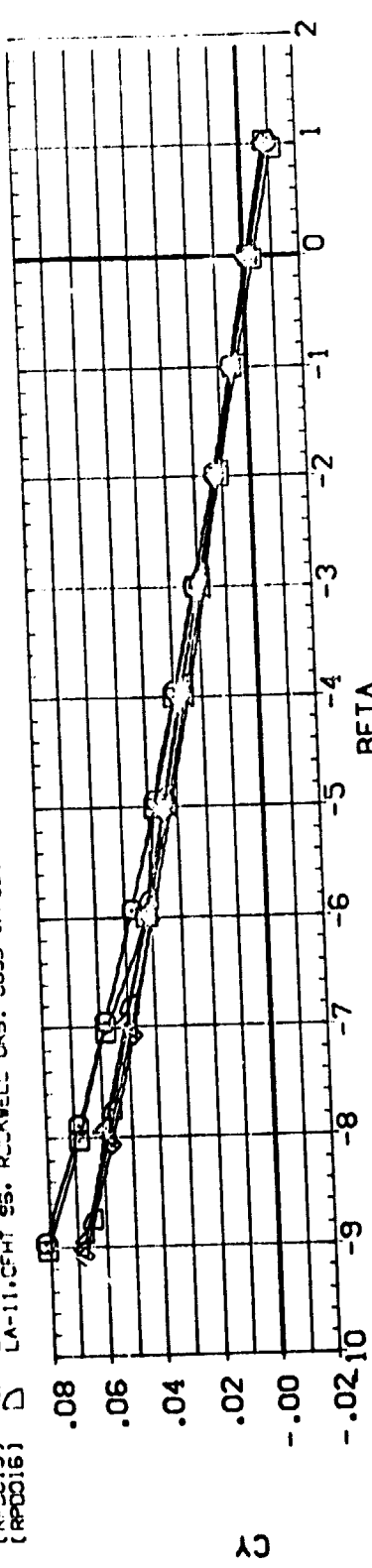
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	BOFLAP	REFERENCE INFORMATION
(RPO011)	LA-11, CHT 96, ROCKWELL C93, C988 V/MOD, NUSE	10.000	-10.000	.000	-14.250	21.7865
(RPO012)	LA-11, CHT 96, ROCKWELL C93, C988 V/MOD, NUSE	15.000	-10.000	.000	-14.250	3.5511
(RPO013)	LA-11, CHT 96, ROCKWELL C93, C988 V/MOD, NUSE	20.000	-10.000	.000	-14.250	7.0251
(RPO014)	LA-11, CHT 96, ROCKWELL C93, C988 V/MOD, NUSE	25.000	-10.000	.000	-14.250	6.0000
(RPO015)	LA-11, CHT 96, ROCKWELL C93, C988 V/MOD, NUSE	30.000	-10.000	.000	-14.250	1.0000
(RPO016)	LA-11, CHT 96, ROCKWELL C93, C988 V/MOD, NUSE	35.000	-10.000	.000	-14.250	1.0000



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-10,AILERON= 0)

(M)MACH = 10.30

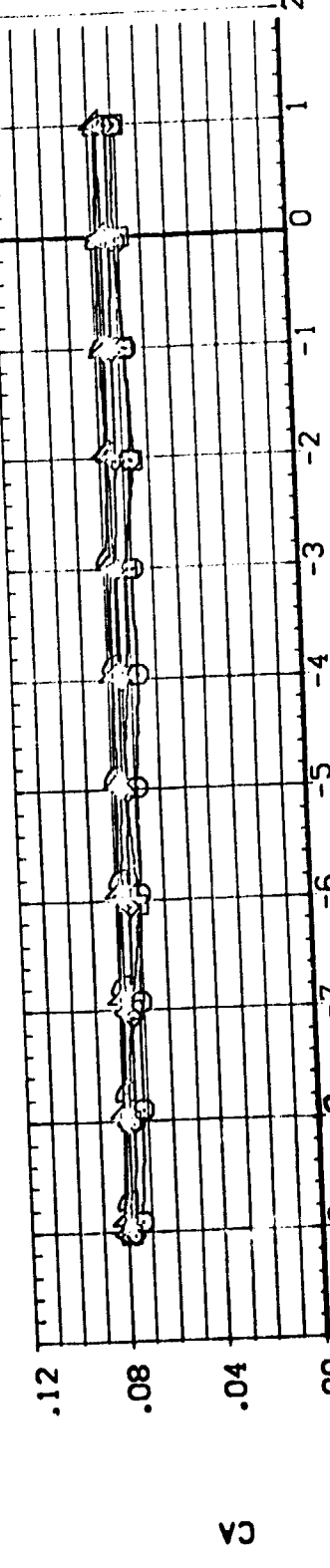
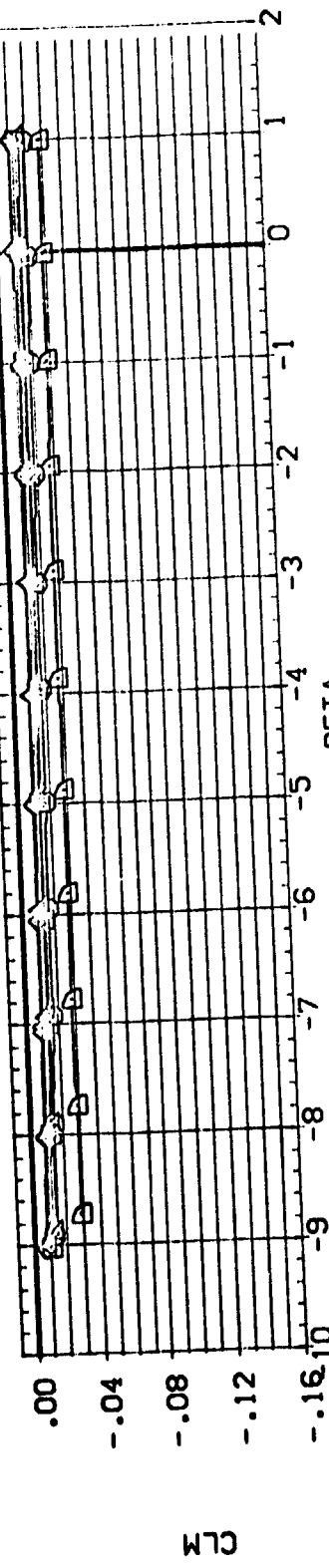
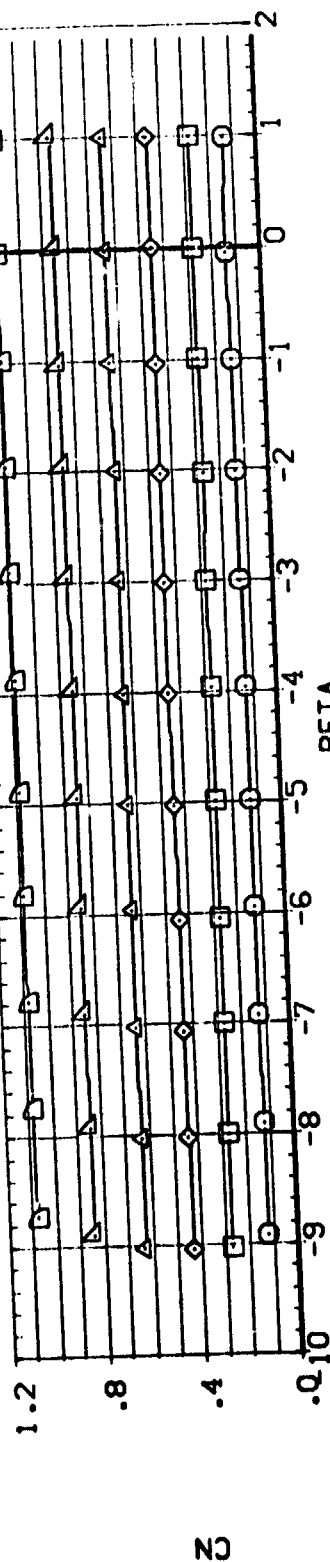
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	BOFLAP	REFERENCE INFORMATION
(RPO011)	LA-11:CFHT 96: ROCKWELL CR3: C869 V/MOD: NOSE	10.000	-10.000	.000	-14.250	21.7886
(RPO012)	LA-11:CFHT 96: ROCKWELL CR3: C869 V/MOD: NOSE	15.000	-10.000	.000	-14.250	3.5611
(RPO013)	LA-11:CFHT 96: ROCKWELL CR3: C869 V/MOD: NOSE	20.000	-10.000	.000	-14.250	7.0252
(RPO014)	LA-11:CFHT 96: ROCKWELL CR3: C869 V/MOD: NOSE	25.000	-10.000	.000	-14.250	6.2222
(RPO015)	LA-11:CFHT 96: ROCKWELL CR3: C869 V/MOD: NOSE	30.000	-10.000	.000	-14.250	.0000
(RPO016)	LA-11:CFHT 96: ROCKWELL CR3: C869 V/MOD: NOSE	35.000	-10.000	.000	-14.250	.0075

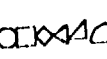


BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-10,AILRON= 0)



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	BOFLAP	REFERENCE INFORMATION	SC. IN.
(R20019)	LA-111.C.H.T. 98: ROCKWELL CFB.	10.000	-20.000	.000	-14.250	SREF	21.7886
(R20020)	LA-111.C.H.T. 98: ROCKWELL CFB.	15.000	-20.000	.000	-14.250	LRREF	3.5611
(R20021)	LA-111.C.H.T. 98: ROCKWELL CFB.	20.000	-20.000	.000	-14.250	BRREF	7.0250
(R20022)	LA-111.C.H.T. 98: ROCKWELL CFB.	25.000	-20.000	.000	-14.250	VMREF	6.2932
(R20023)	LA-111.C.H.T. 98: ROCKWELL CFB.	30.000	-20.000	.000	-14.250	VMREF	.0000
(R20024)	LA-111.C.H.T. 98: ROCKWELL CFB.	35.000	-20.000	.000	-14.250	VMREF	.0000
						SCALE	.0075



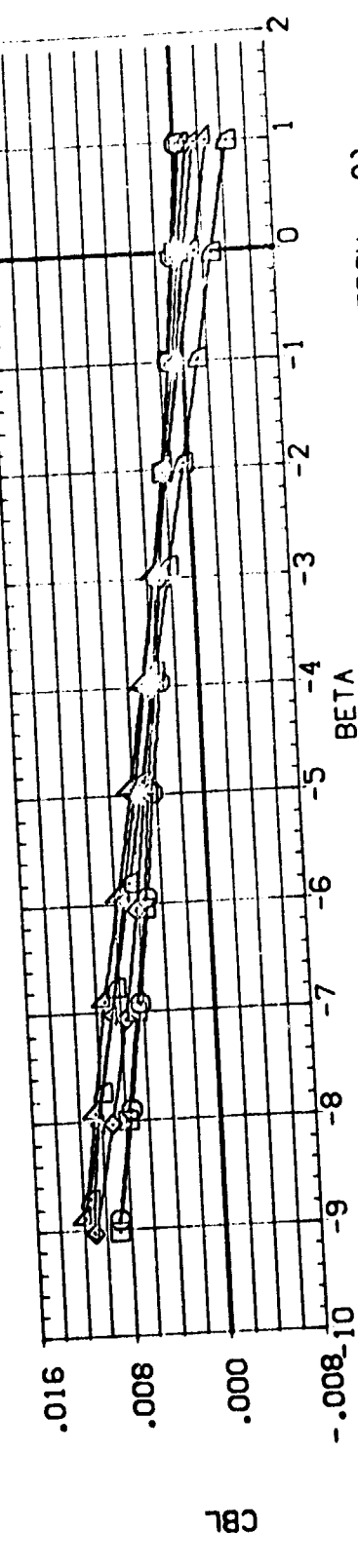
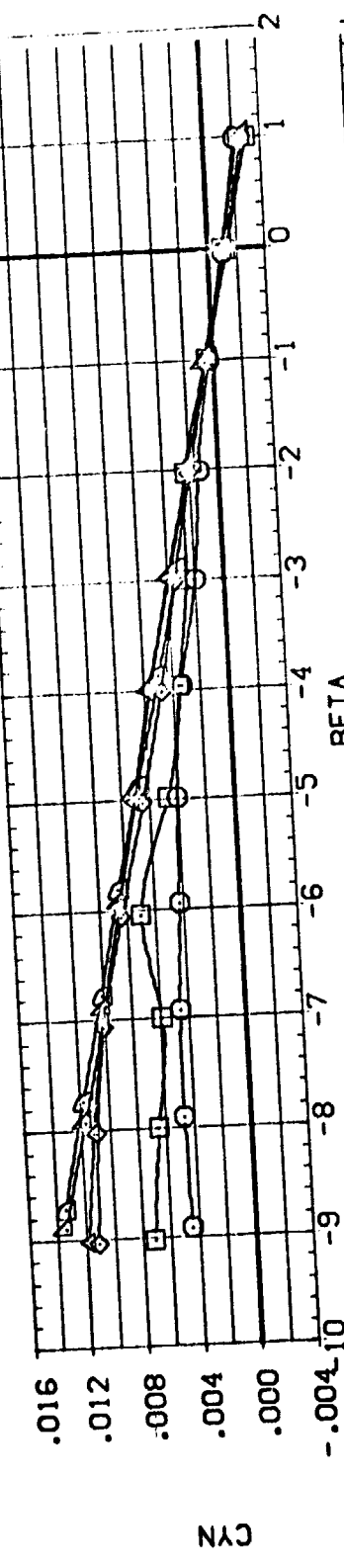
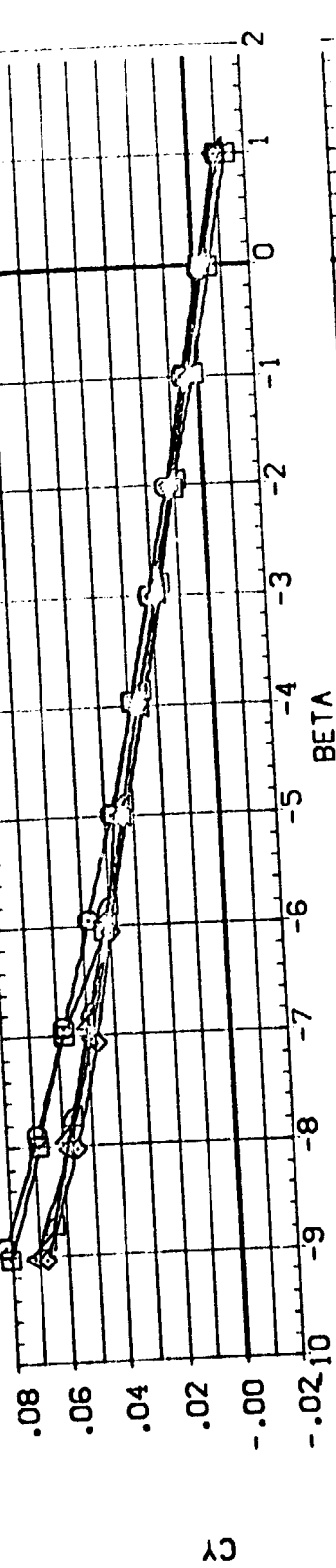
DATA SET SYMBOL: 

CONFIGURATION DESCRIPTION

LA-11	CEHT	95	ROCKWELL	CRB	0893	V/MOD	NOSE
LA-11	CEHT	95	ROCKWELL	CRB	0893	V/MOD	NOSE
LA-11	CEHT	95	ROCKWELL	CRB	0893	V/MOD	NOSE
LA-11	CEHT	95	ROCKWELL	CRB	0893	V/MOD	NOSE
LA-11	CEHT	95	ROCKWELL	CRB	0893	V/MOD	NOSE
LA-11	CEHT	95	ROCKWELL	CRB	0893	V/MOD	NOSE

REFERENCE INFORMATION

ALPHA	ELEVTR	AILRON	BOFLAP	SREF	21.7886	SCALE
10.000	-20.000	.000	-14.250	SREF	21.7886	SCALE
15.000	-20.000	.000	-14.250	REF	3.5511	SCALE
20.000	-20.000	.000	-14.250	REF	7.0252	SCALE
25.000	-20.000	.000	-14.250	REF	6.0000	SCALE
30.000	-20.000	.000	-14.250	REF	6.0000	SCALE
35.000	-20.000	.000	-14.250	REF	6.0000	SCALE



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-20,AILERON= 0)

(MACH = 10.30)

PAGE 20



DATA SET SYMBOL: [Symbol]
[R00077]
[R00078]
[R00079]
[R00080]
[R00081]
[R00082]

CONFIGURATION DESCRIPTION:
LA-11-CFHT 95: ROCKWELL CRB.
LA-11-CFHT 95: ROCKWELL CRB.
LA-11-CFHT 95: ROCKWELL CRB.
LA-11-CFHT 95: ROCKWELL CRB.
LA-11-CFHT 95: ROCKWELL CRB.
LA-11-CFHT 95: ROCKWELL CRB.

NOSE: V/MCO: C893 V/MCO: C893 V/MCO: C893 V/MCO: C893 V/MCO: C893 V/MCO: C893

ALPHA: 10.000
15.000
20.000
25.000
30.000
35.000

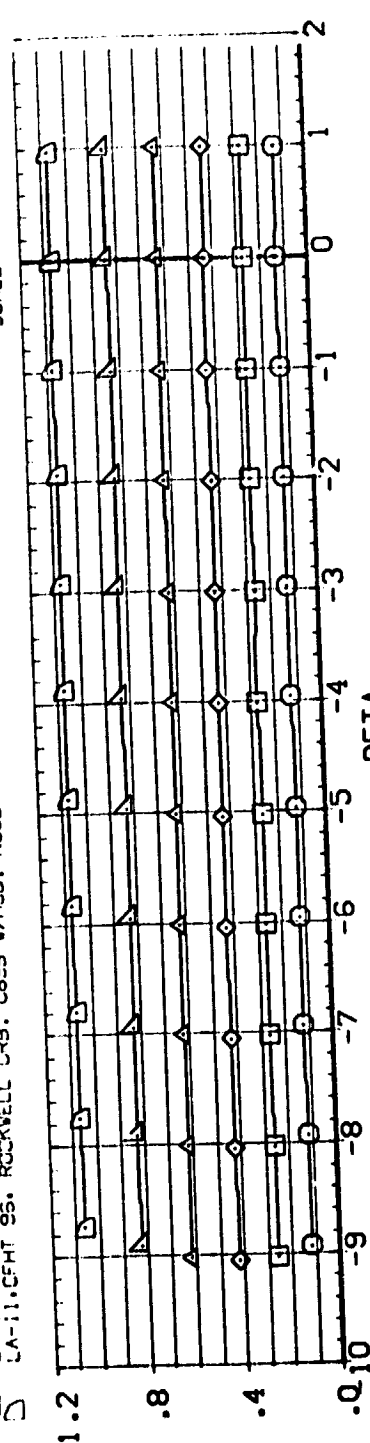
ELEVTR: -40.000
-40.000
-40.000
-40.000
-40.000
-40.000

AILERON: .000
.000
.000
.000
.000
.000

BOCLAP: -14.250
-14.250
-14.250
-14.250
-14.250
-14.250

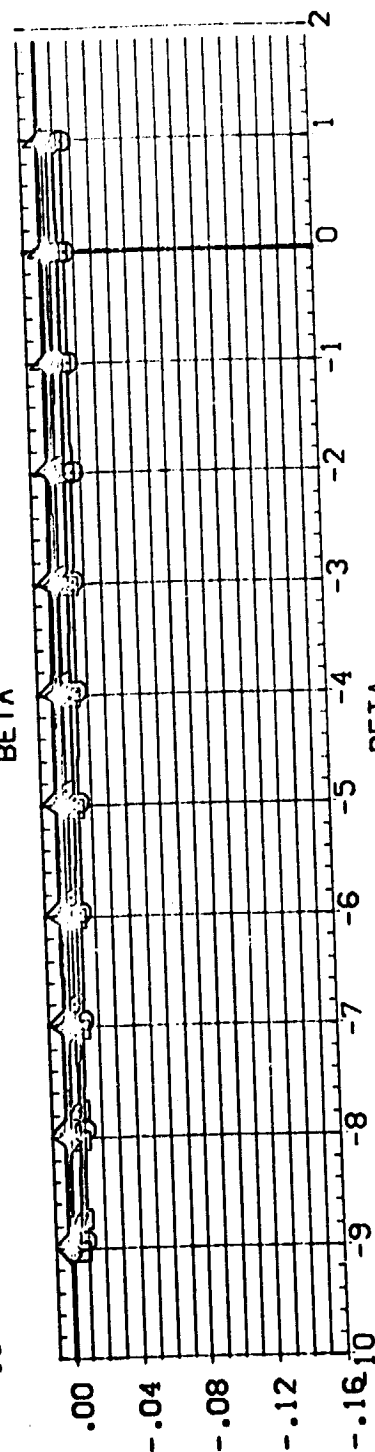
REFERENCE INFORMATION:
SREF: 21.7885
LREF: 3.5611
BREF: 7.0232
VREF: 6
VREF: 6
VREF: 6
VREF: 6
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VREF: 6

SCALE: .005
.005
.005
.005
.005
.005



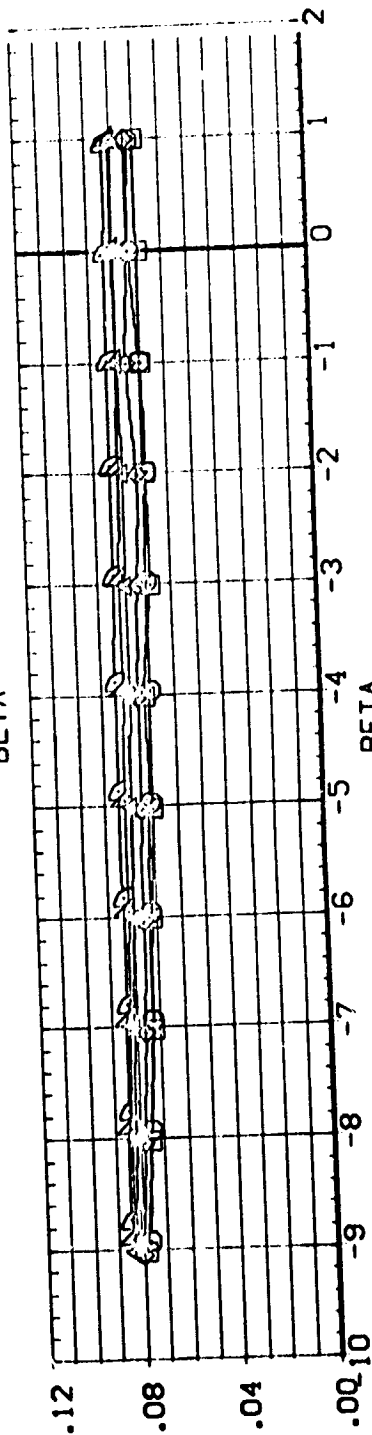
BETA

CLM



BETA

Ca

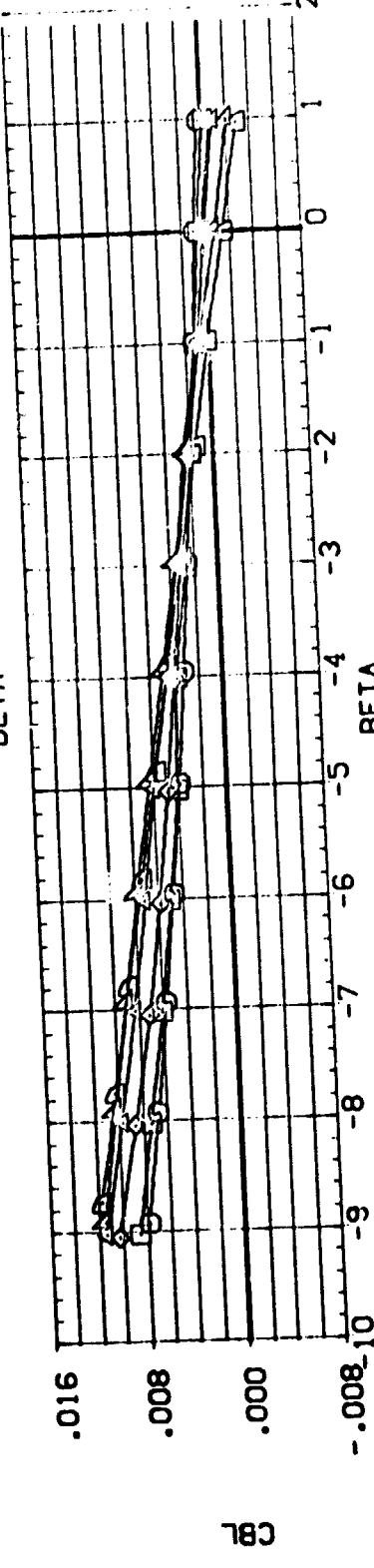
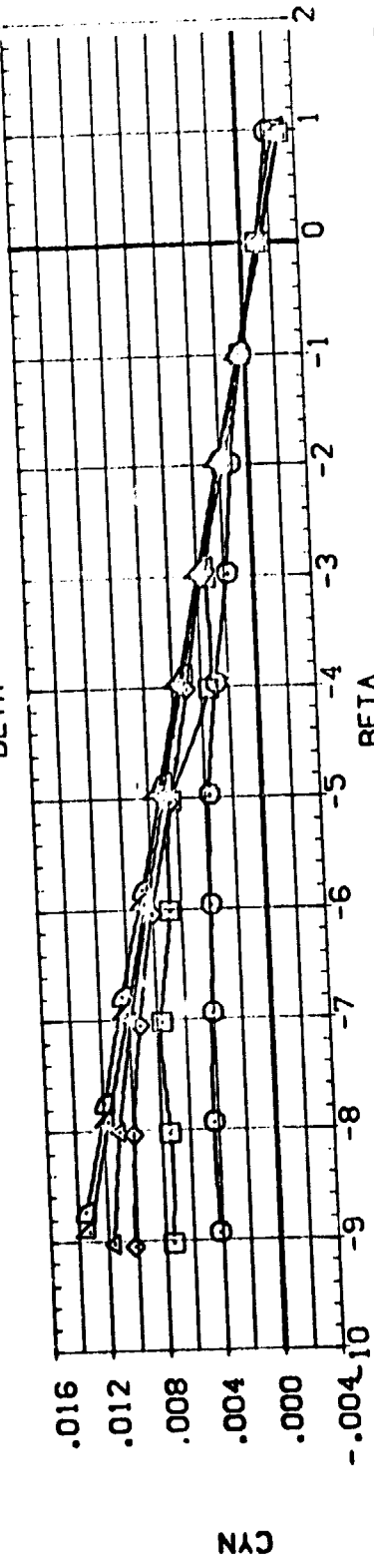
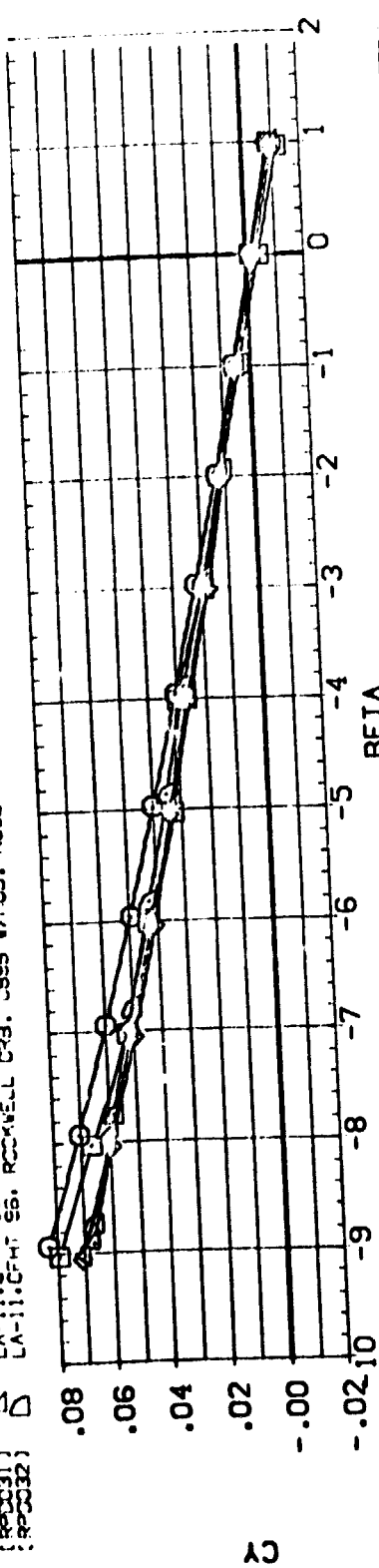


BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-40,AILERON= 0)

(A)MACH = 10.30

DATA SET SYMBOL: **CLM**

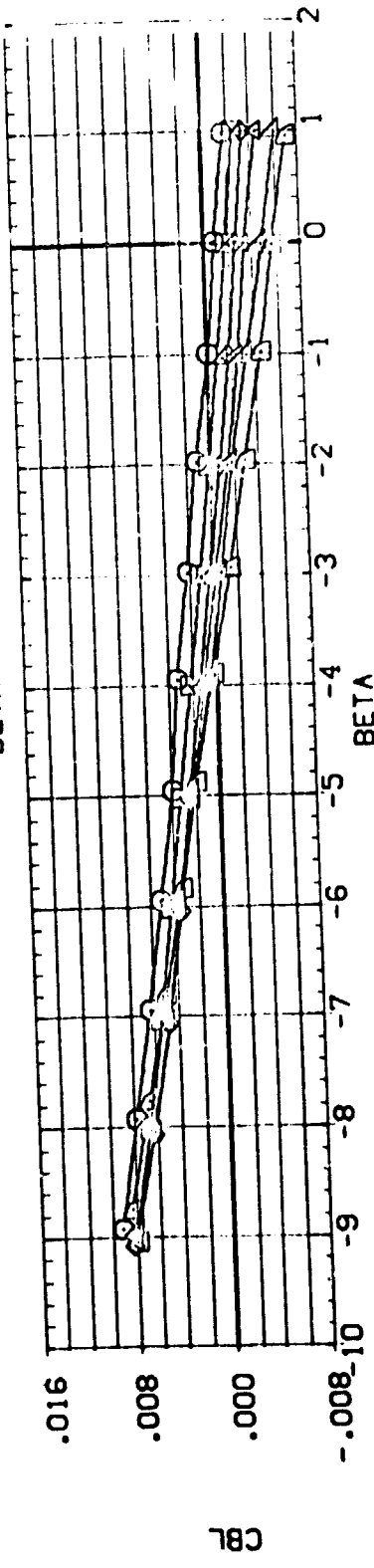
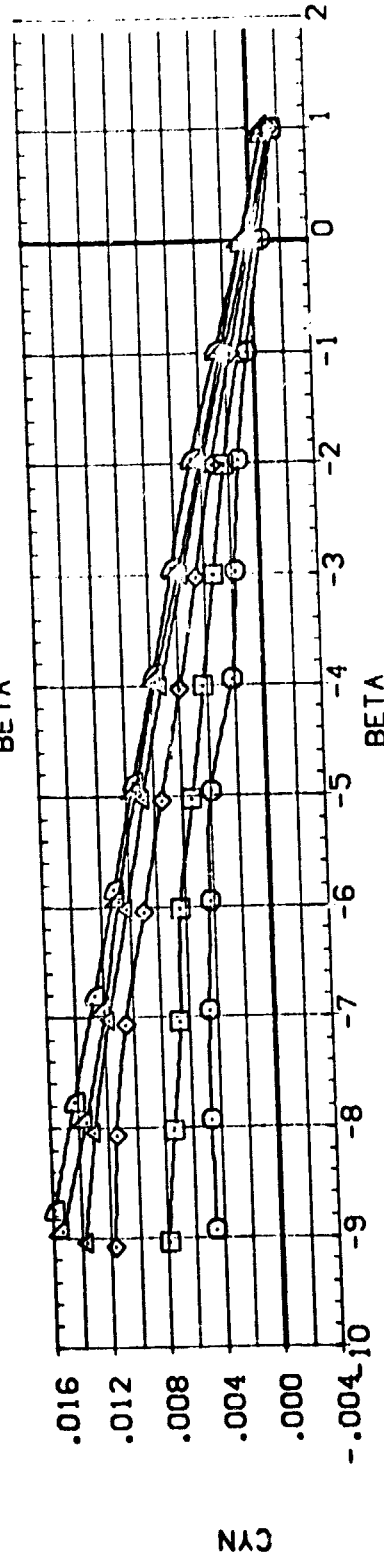
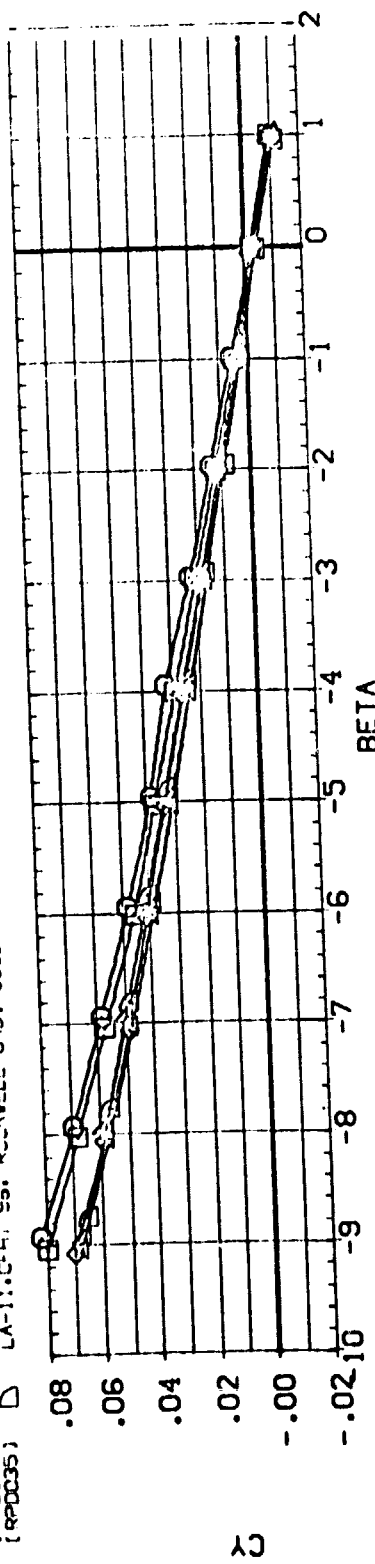
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVATOR	AILERON	BOFLAP	REFERENCE INFORMATION
[RPO027]	LA-11: CHT 56: ROCKWELL C-3: C-383 V/MOD: NOSE	10.000	-40.000	.000	-14.250	21.7895
[RPO028]	LA-11: CHT 56: ROCKWELL C-3: C-383 V/MOD: NOSE	15.000	-40.000	.000	-14.250	3.5611
[RPO029]	LA-11: CHT 56: ROCKWELL C-3: C-383 V/MOD: NOSE	20.000	-40.000	.000	-14.250	7.0262
[RPO030]	LA-11: CHT 56: ROCKWELL C-3: C-383 V/MOD: NOSE	25.000	-40.000	.000	-14.250	6.2892
[RPO031]	LA-11: CHT 56: ROCKWELL C-3: C-383 V/MOD: NOSE	30.000	-40.000	.000	-14.250	.0000
[RPO032]	LA-11: CHT 56: ROCKWELL C-3: C-383 V/MOD: NOSE	35.000	-40.000	.000	-14.250	.0000



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-40,AILERON= 0)

CAVMACH = 10.30

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILRON	BDCLAP	REFERENCE INFORMATION
[RPO040]	LA-11: CHT 98: ROCKWELL C38: 0899 V/MOD: 0000	10.0000	0.0000	0.0000	4.250	21.7885
[RPO039]	LA-11: CHT 98: ROCKWELL C38: 0899 V/MOD: 0000	15.0000	0.0000	0.0000	4.250	3.5611
[RPO038]	LA-11: CHT 98: ROCKWELL C38: 0899 V/MOD: 0000	20.0000	0.0000	0.0000	4.250	7.0261
[RPO037]	LA-11: CHT 98: ROCKWELL C38: 0899 V/MOD: 0000	25.0000	0.0000	0.0000	4.250	6.7832
[RPO036]	LA-11: CHT 98: ROCKWELL C38: 0899 V/MOD: 0000	30.0000	0.0000	0.0000	4.250	0.0000
[RPO035]	LA-11: CHT 98: ROCKWELL C38: 0899 V/MOD: 0000	35.0000	0.0000	0.0000	4.250	0.0000

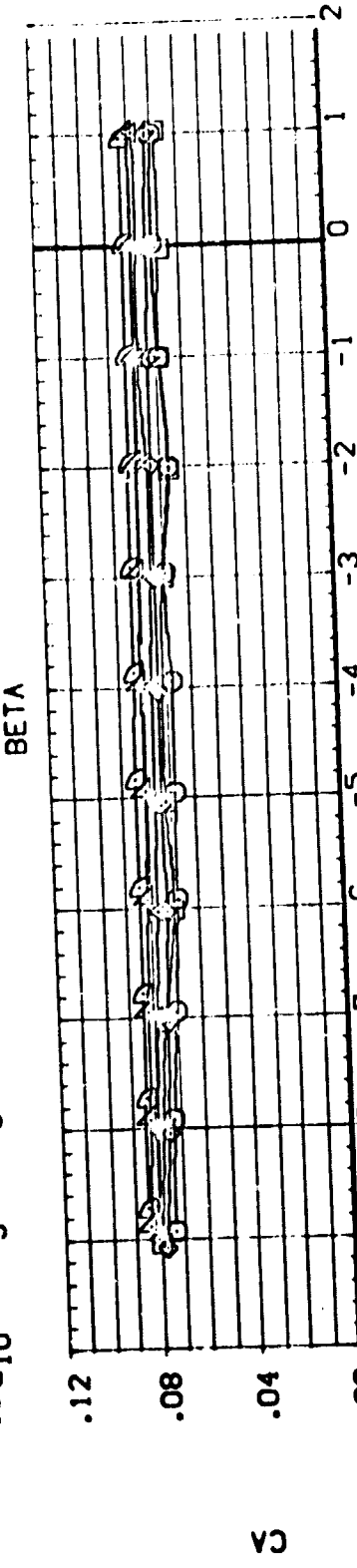
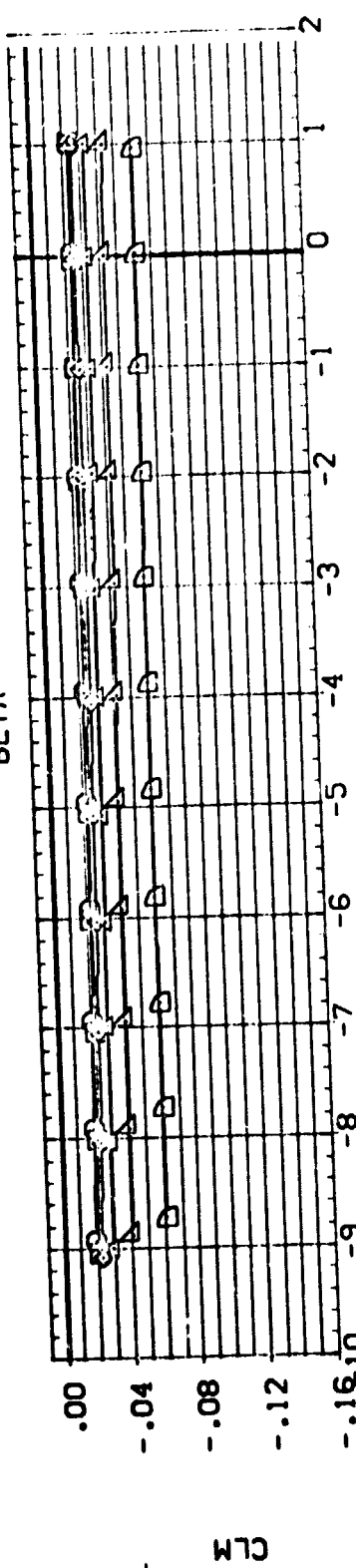
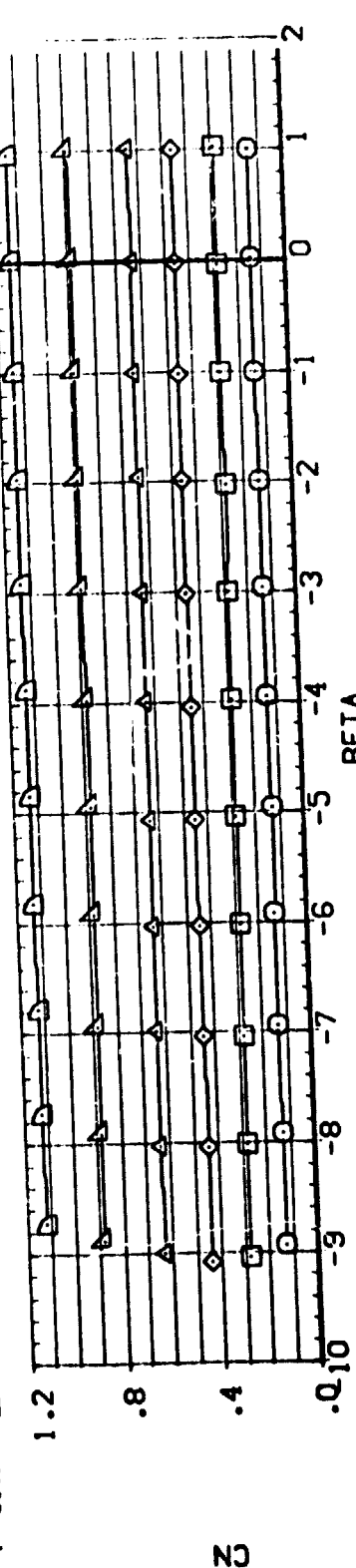


BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR= 10. AILERON= 0)

[A] MACH = 10.30



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILERON	BOFLAP	REFERENCE INFORMATION
[RPO043]	LA-11 CFHT 95: ROCKWELL CR3	10.000	-10.000	10.000	-14.250	SREF 21.7885
[RPO044]	LA-11 CFHT 95: ROCKWELL CR3	15.000	-10.000	10.000	-14.250	LREF 1.551
[RPO045]	LA-11 CFHT 95: ROCKWELL CR3	20.000	-10.000	10.000	-14.250	BREF 0.822
[RPO046]	LA-11 CFHT 95: ROCKWELL CR3	25.000	-10.000	10.000	-14.250	XV25 2.000
[RPO047]	LA-11 CFHT 95: ROCKWELL CR3	30.000	-10.000	10.000	-14.250	YV25 0.000
[RPO048]	LA-11 CFHT 95: ROCKWELL CR3	35.000	-10.000	10.000	-14.250	ZV25 0.000
						SCALE 0.075



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-10,AILERON= 10)

(A)MACH = 10.30

DATA SET SYMBOL: [R0043] [R0044] [R0045] [R0046] [R0047] [R0048]

CONFIGURATION DESCRIPTION: LA-11-CEMT 56: ROCKWELL CR3: C883 V/MOD: NOSE LA-11-CEMT 56: ROCKWELL CR3: C883 V/MOD: NOSE LA-11-CEMT 56: ROCKWELL CR3: C883 V/MOD: NOSE LA-11-CEMT 56: ROCKWELL CR3: C883 V/MOD: NOSE LA-11-CEMT 56: ROCKWELL CR3: C883 V/MOD: NOSE

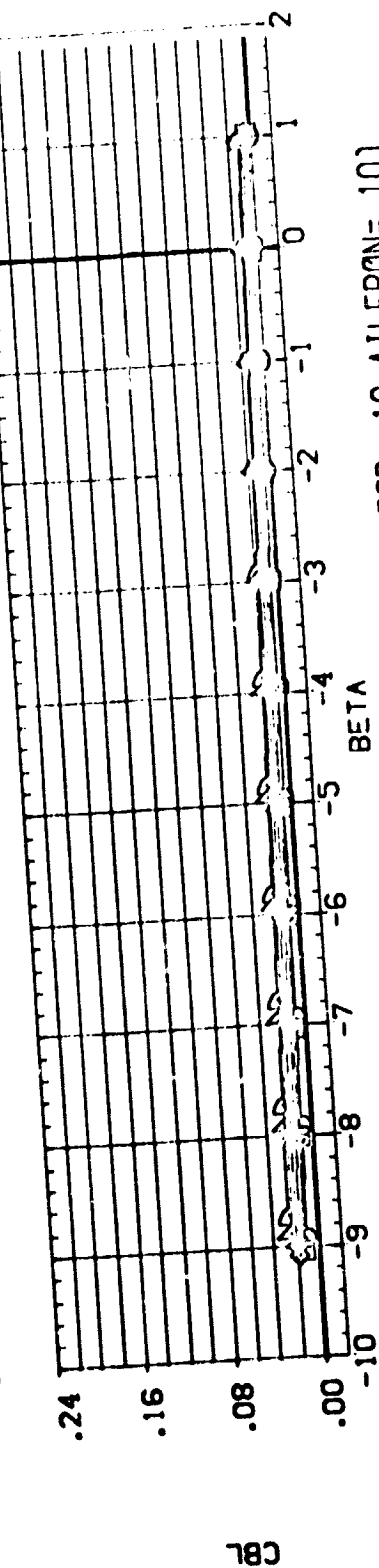
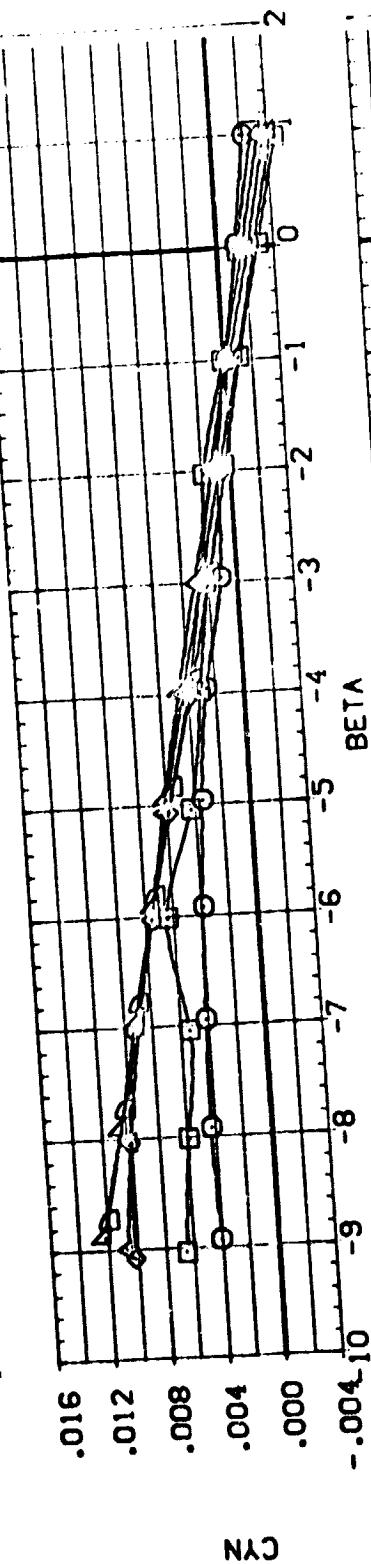
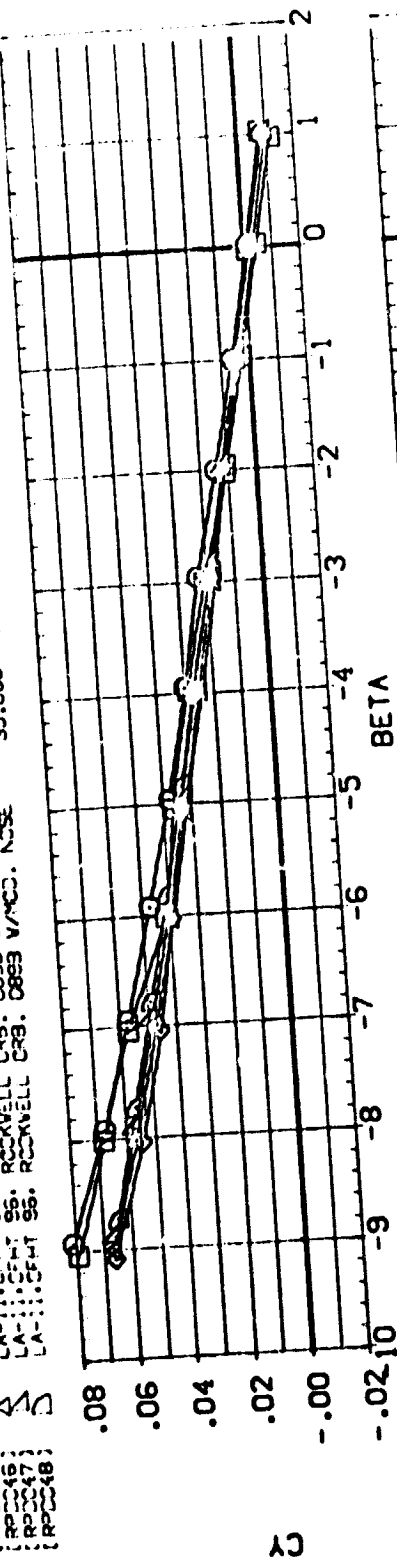
ALPHA: 10.000 15.000 20.000 25.000 30.000 35.000

ELEVTR: -10.000 -10.000 -10.000 -10.000 -10.000 -10.000

AILRON: 10.000 10.000 10.000 10.000 10.000 10.000

BOFLAP: -14.250 -14.250 -14.250 -14.250 -14.250 -14.250

REFERENCE INFORMATION: SREF: 21.7885 LREF: 3.5611 BREF: 7.0251 XREF: 6.7800 YREF: 1.0000 ZREF: 1.0000 SCALE: 1.0000



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-10,AILERON= 10)

(A)MACH = 10.30

DATA SET SYMBOL
 000001
 000002
 000003
 000004
 000005
 000006
 000007
 000008
 000009
 000010

CONFIGURATION DESCRIPTION
 LA-11: CHT 98: ROCKWELL
 LA-11: CHT 99: ROCKWELL
 LA-11: CHT 99: ROCKWELL
 LA-11: CHT 99: ROCKWELL
 LA-11: CHT 99: ROCKWELL
 LA-11: CHT 99: ROCKWELL
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 LA-11: CHT 99: ROCKWELL
 LA-11: CHT 99: ROCKWELL

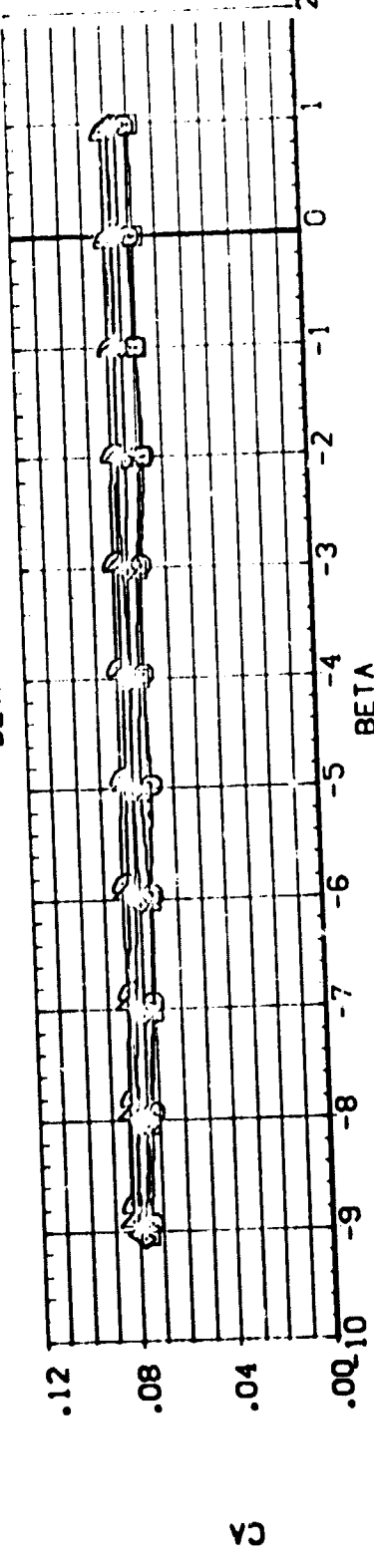
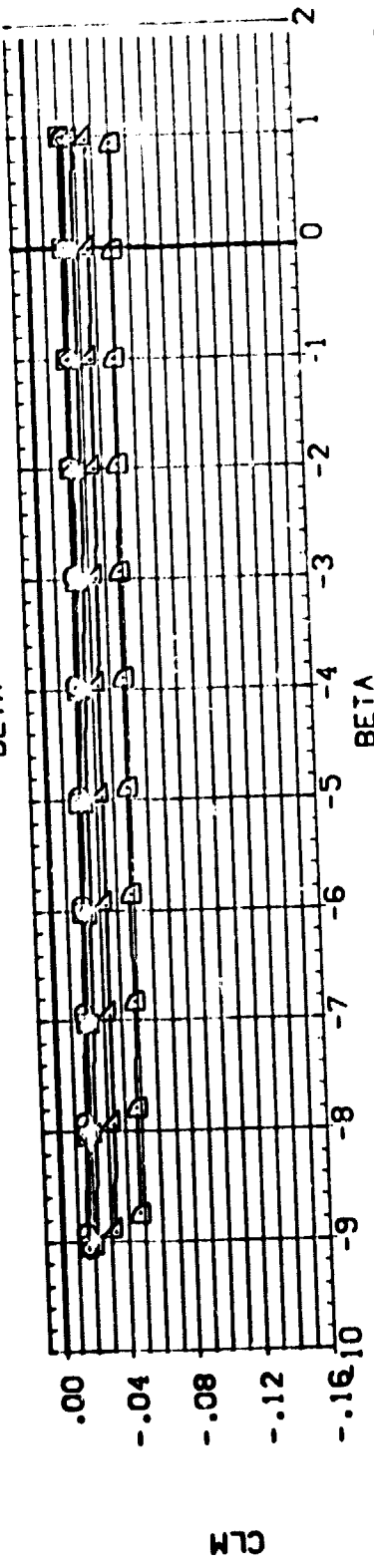
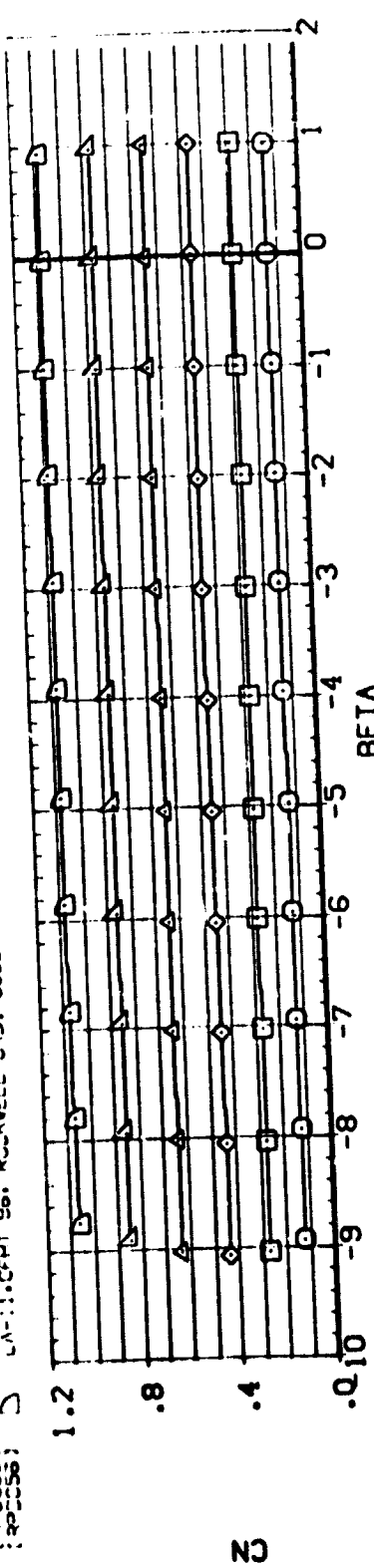
ALPHA
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 20.000
 25.000
 30.000
 35.000

ELEVTR
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 0.000
 0.000
 0.000
 0.000
 0.000

AILERON
 0.000
 0.000
 0.000
 0.000
 0.000
 0.000

BOELAP
 14.200
 14.200
 14.200
 14.200
 14.200
 14.200

REFERENCE INFORMATION
 21.7885
 3.5000
 3.5000
 3.5000
 3.5000
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 3.5000
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 3.5000



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-10,AILERON=-10)

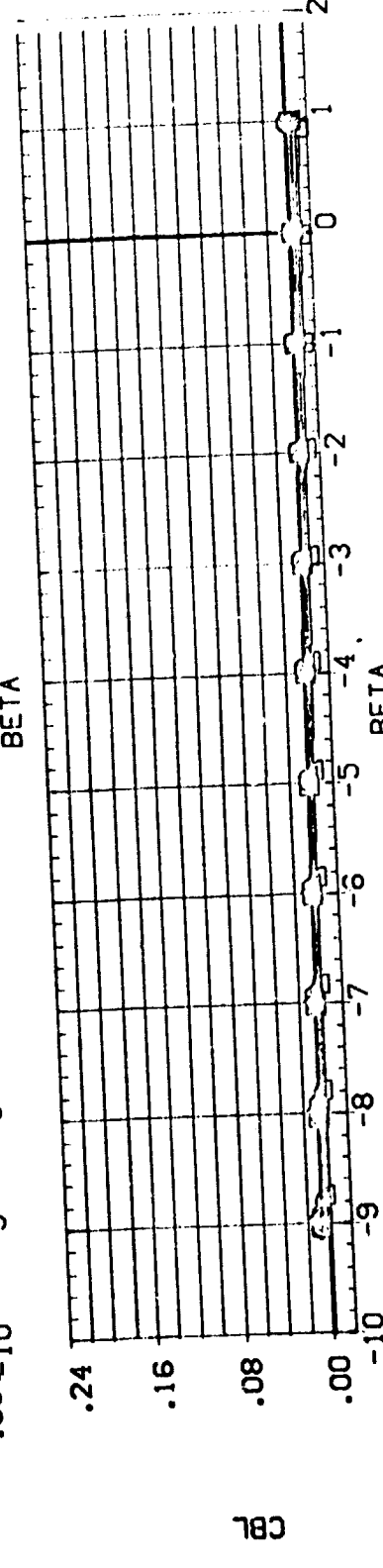
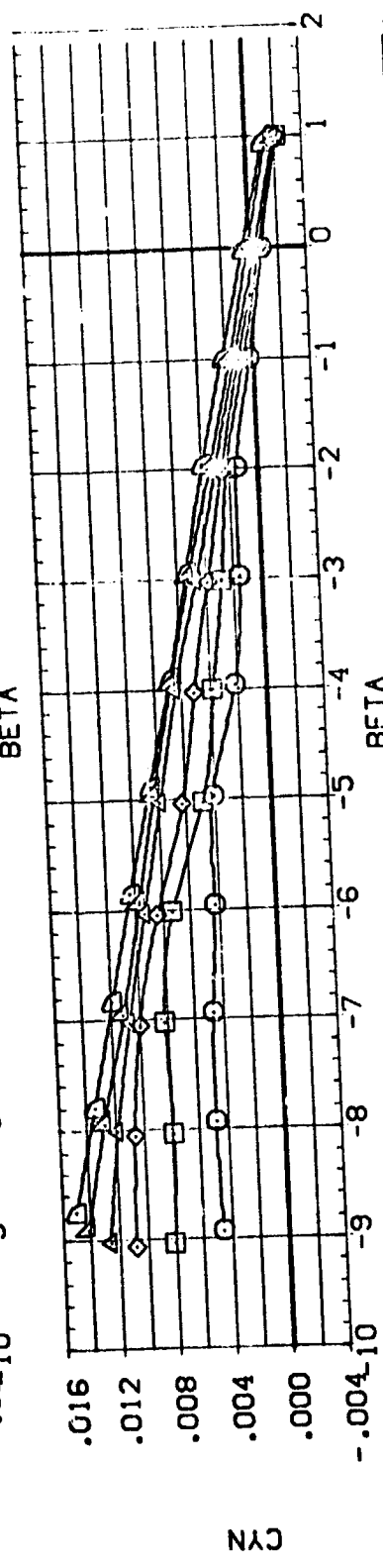
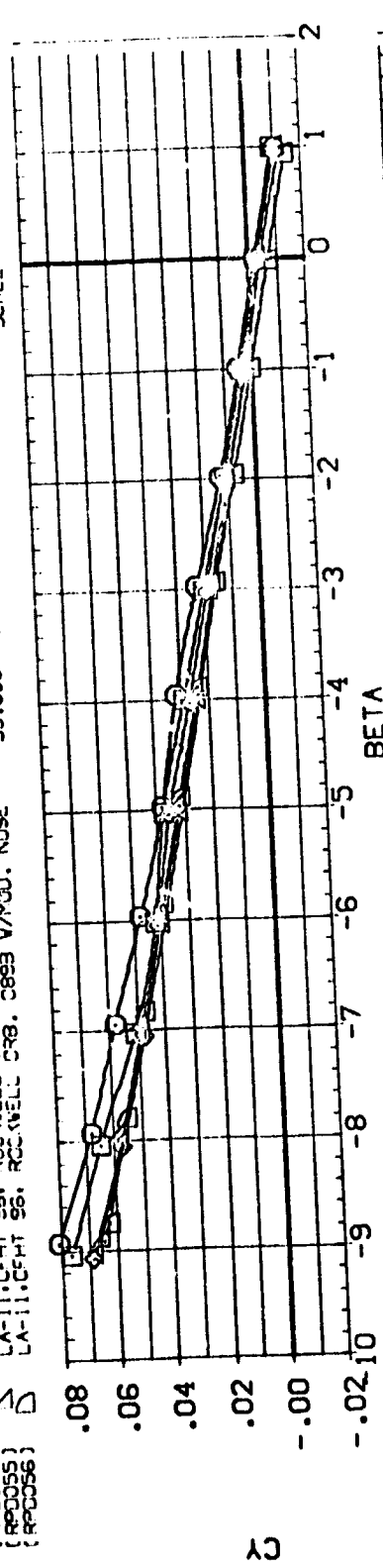
MACMACH = 10.30

DATA SET SYMBOL
 (RPO031)
 (RPO032)
 (RPO033)
 (RPO034)
 (RPO035)
 (RPO036)

CONFIGURATION DESCRIPTION
 LA-11-CFHT 96: ROCKWELL C88: V/MOD: NOSE
 LA-11-CFHT 96: ROCKWELL C88: V/MOD: NOSE
 LA-11-CFHT 96: ROCKWELL C88: V/MOD: NOSE
 LA-11-CFHT 96: ROCKWELL C88: V/MOD: NOSE
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 LA-11-CFHT 96: ROCKWELL C88: V/MOD: NOSE

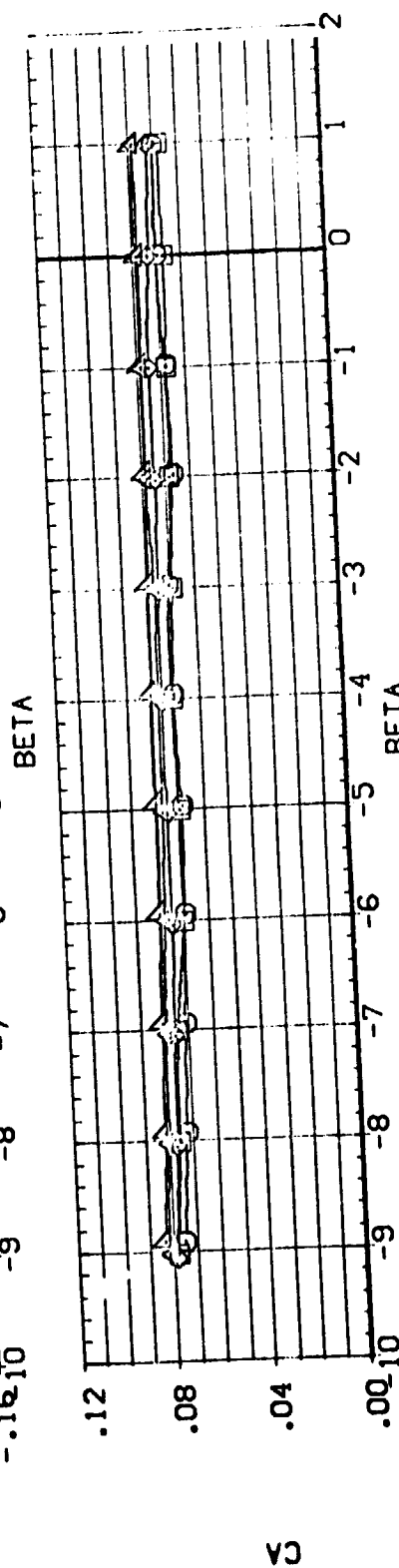
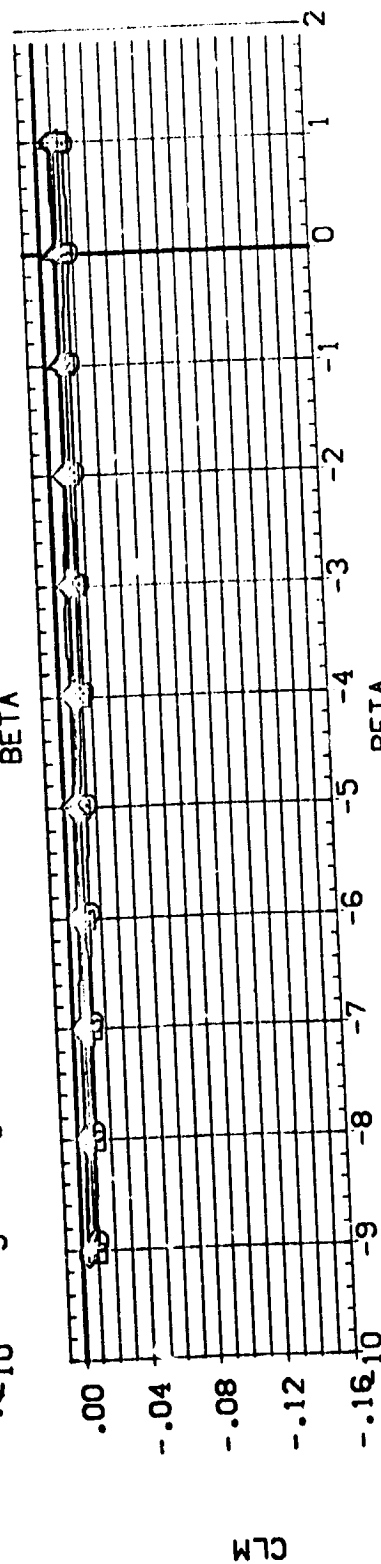
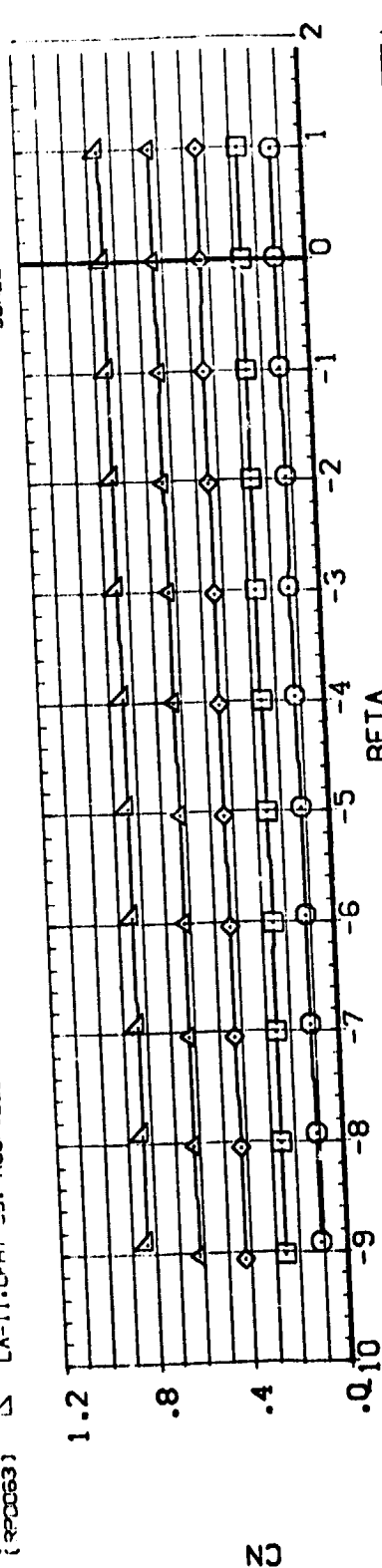
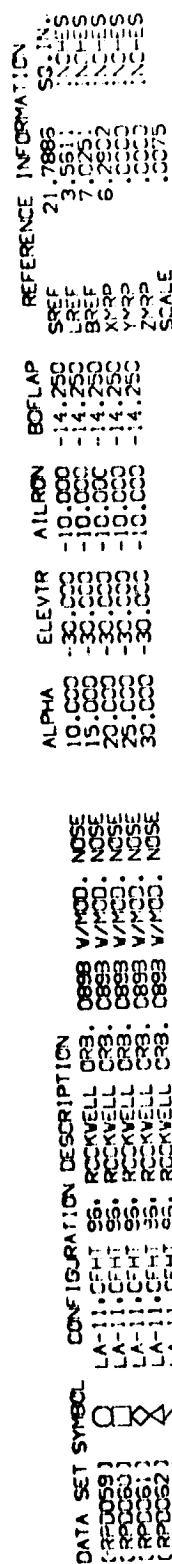
ALPHA
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 25.000
 30.000
 35.000

REFERENCE INFORMATION
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 LREF 3.5611
 BREF 7.2222
 VREF 6
 WREF 0.0000
 ZREF 0.0000
 SCALE 1.0075



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-10,AILERON=-10)

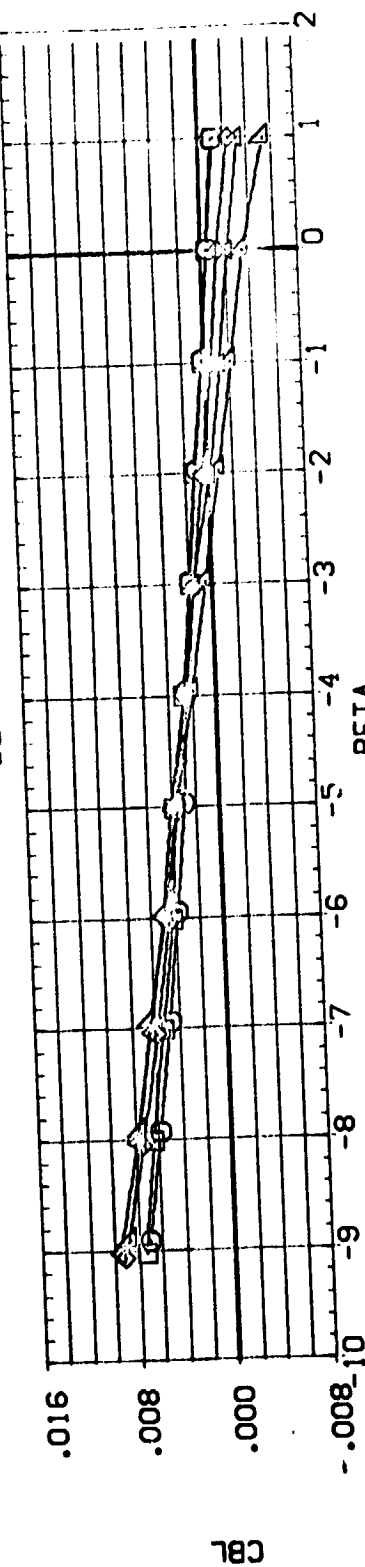
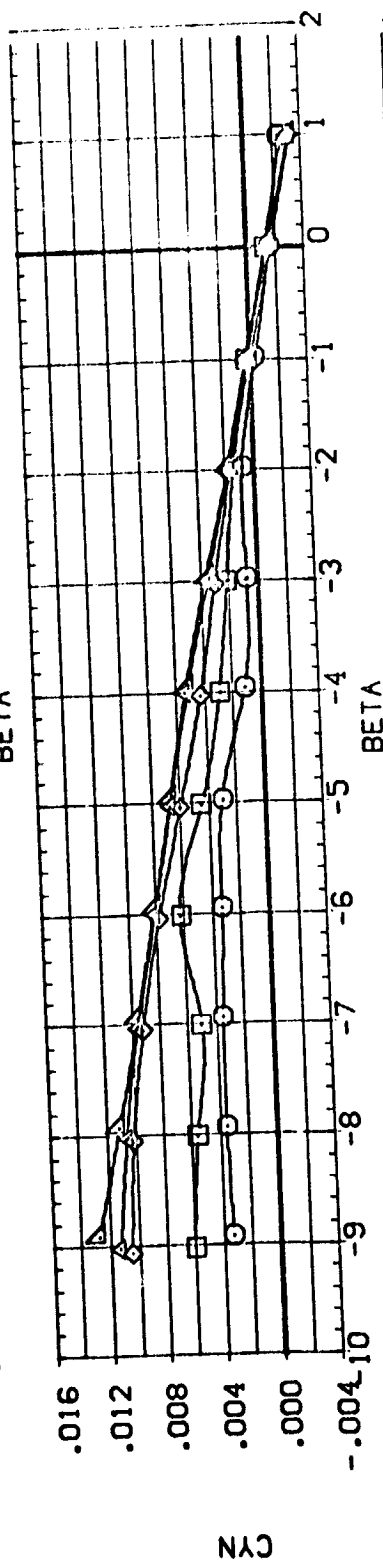
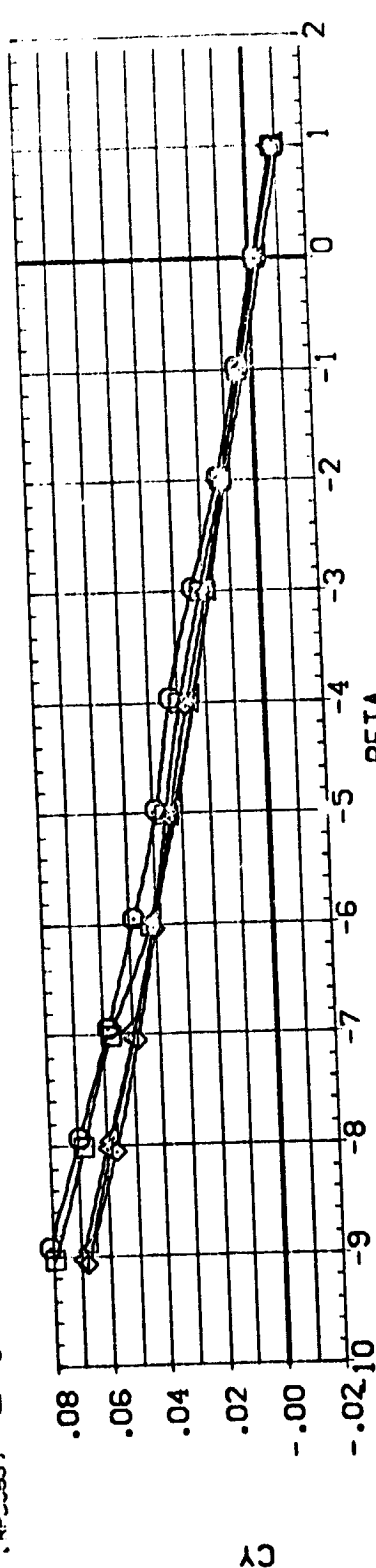
CAJ MACH = 10.30



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-30,AILERON=-10)
BETA PAGE

$(A)_{MACH} = 10.30$

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	NOSE	V/MOD.	ALPHA	ELEVTR	AIRLON	BOFLAP	REFERENCE INFORMATION
000001	L1-1	GEHT 86	0898	0898	10.000	-30.000	-10.000	-14.250	SREF 21.7885
000002	L1-1	GEHT 86	0898	0898	15.000	-30.000	-10.000	-14.250	SREF 21.7885
000003	L1-1	GEHT 86	0898	0898	20.000	-30.000	-10.000	-14.250	SREF 21.7885
000004	L1-1	GEHT 86	0898	0898	25.000	-30.000	-10.000	-14.250	SREF 21.7885
000005	L1-1	GEHT 86	0898	0898	30.000	-30.000	-10.000	-14.250	SREF 21.7885
000006	L1-1	GEHT 86	0898	0898	35.000	-30.000	-10.000	-14.250	SREF 21.7885
000007	L1-1	GEHT 86	0898	0898	40.000	-30.000	-10.000	-14.250	SREF 21.7885
000008	L1-1	GEHT 86	0898	0898	45.000	-30.000	-10.000	-14.250	SREF 21.7885
000009	L1-1	GEHT 86	0898	0898	50.000	-30.000	-10.000	-14.250	SREF 21.7885
000010	L1-1	GEHT 86	0898	0898	55.000	-30.000	-10.000	-14.250	SREF 21.7885
000011	L1-1	GEHT 86	0898	0898	60.000	-30.000	-10.000	-14.250	SREF 21.7885
000012	L1-1	GEHT 86	0898	0898	65.000	-30.000	-10.000	-14.250	SREF 21.7885
000013	L1-1	GEHT 86	0898	0898	70.000	-30.000	-10.000	-14.250	SREF 21.7885
000014	L1-1	GEHT 86	0898	0898	75.000	-30.000	-10.000	-14.250	SREF 21.7885
000015	L1-1	GEHT 86	0898	0898	80.000	-30.000	-10.000	-14.250	SREF 21.7885
000016	L1-1	GEHT 86	0898	0898	85.000	-30.000	-10.000	-14.250	SREF 21.7885
000017	L1-1	GEHT 86	0898	0898	90.000	-30.000	-10.000	-14.250	SREF 21.7885
000018	L1-1	GEHT 86	0898	0898	95.000	-30.000	-10.000	-14.250	SREF 21.7885
000019	L1-1	GEHT 86	0898	0898	100.000	-30.000	-10.000	-14.250	SREF 21.7885
000020	L1-1	GEHT 86	0898	0898	105.000	-30.000	-10.000	-14.250	SREF 21.7885
000021	L1-1	GEHT 86	0898	0898	110.000	-30.000	-10.000	-14.250	SREF 21.7885
000022	L1-1	GEHT 86	0898	0898	115.000	-30.000	-10.000	-14.250	SREF 21.7885
000023	L1-1	GEHT 86	0898	0898	120.000	-30.000	-10.000	-14.250	SREF 21.7885
000024	L1-1	GEHT 86	0898	0898	125.000	-30.000	-10.000	-14.250	SREF 21.7885
000025	L1-1	GEHT 86	0898	0898	130.000	-30.000	-10.000	-14.250	SREF 21.7885
000026	L1-1	GEHT 86	0898	0898	135.000	-30.000	-10.000	-14.250	SREF 21.7885
000027	L1-1	GEHT 86	0898	0898	140.000	-30.000	-10.000	-14.250	SREF 21.7885
000028	L1-1	GEHT 86	0898	0898	145.000	-30.000	-10.000	-14.250	SREF 21.7885
000029	L1-1	GEHT 86	0898	0898	150.000	-30.000	-10.000	-14.250	SREF 21.7885
000030	L1-1	GEHT 86	0898	0898	155.000	-30.000	-10.000	-14.250	SREF 21.7885
000031	L1-1	GEHT 86	0898	0898	160.000	-30.000	-10.000	-14.250	SREF 21.7885
000032	L1-1	GEHT 86	0898	0898	165.000	-30.000	-10.000	-14.250	SREF 21.7885
000033	L1-1	GEHT 86	0898	0898	170.000	-30.			

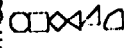
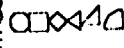
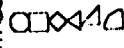


BETA

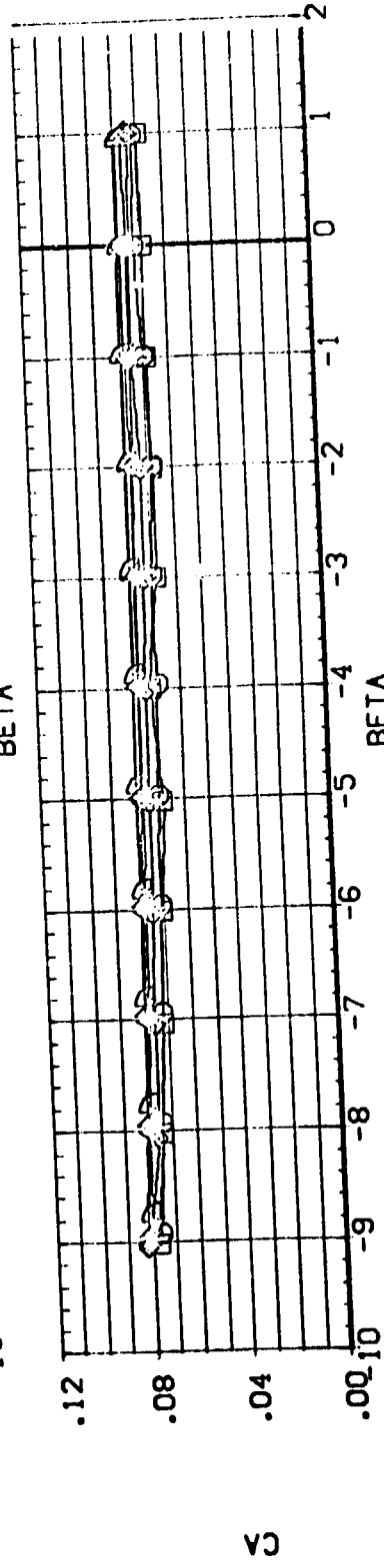
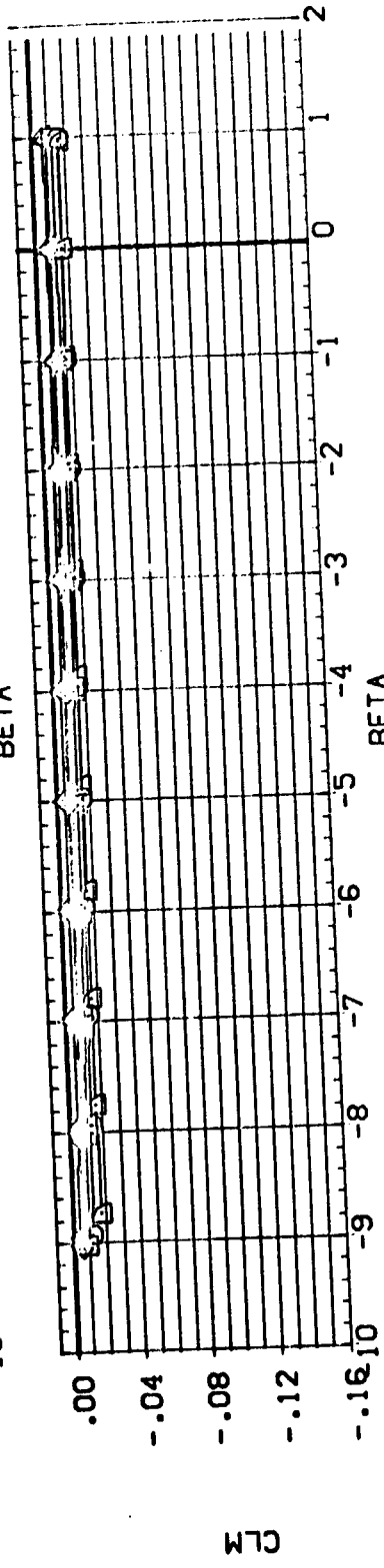
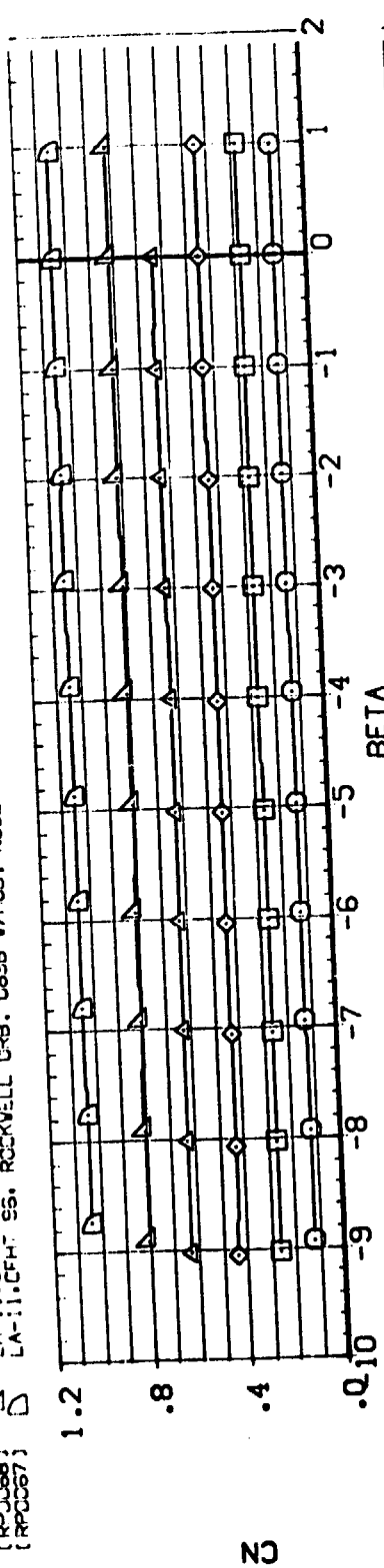
BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-30,AILERON=-10)

PAGE

(A)MACH = 10.30

DATA SET SYMBOL:  CONFIGURATION DESCRIPTION:  REFERENCE INFORMATION: 

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
(R00072)	LA-11: CFT 96, ROCKWELL CRB	SREF 21.7883
(R00071)	LA-11: CFT 96, ROCKWELL CRB	LREF 3.5611
(R00070)	LA-11: CFT 96, ROCKWELL CRB	BREF 7.0251
(R00069)	LA-11: CFT 96, ROCKWELL CRB	XREF 6.2322
(R00068)	LA-11: CFT 96, ROCKWELL CRB	YREF 6.0000
(R00067)	LA-11: CFT 96, ROCKWELL CRB	ZREF 6.0000
		SCALE 0.0075



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-30,AILERON= 10)

(A)MACH = 10.30

DATA SET SYMBOL
 (RPO072)
 (RPO071)
 (RPO070)
 (RPO069)
 (RPO068)
 (RPO067)

CONFIGURATION DESCRIPTION
 LA-11: CHT 96: ROCKWELL CRB.
 LA-11: CHT 96: ROCKWELL CRB.
 LA-11: CHT 96: ROCKWELL CRB.
 LA-11: CHT 96: ROCKWELL CRB.
 LA-11: CHT 96: ROCKWELL CRB.
 LA-11: CHT 96: ROCKWELL CRB.

0898 V/MCD. NOSE
 0898 V/MCD. NOSE
 0898 V/MCD. NOSE
 0898 V/MCD. NOSE
 0898 V/MCD. NOSE
 0898 V/MCD. NOSE

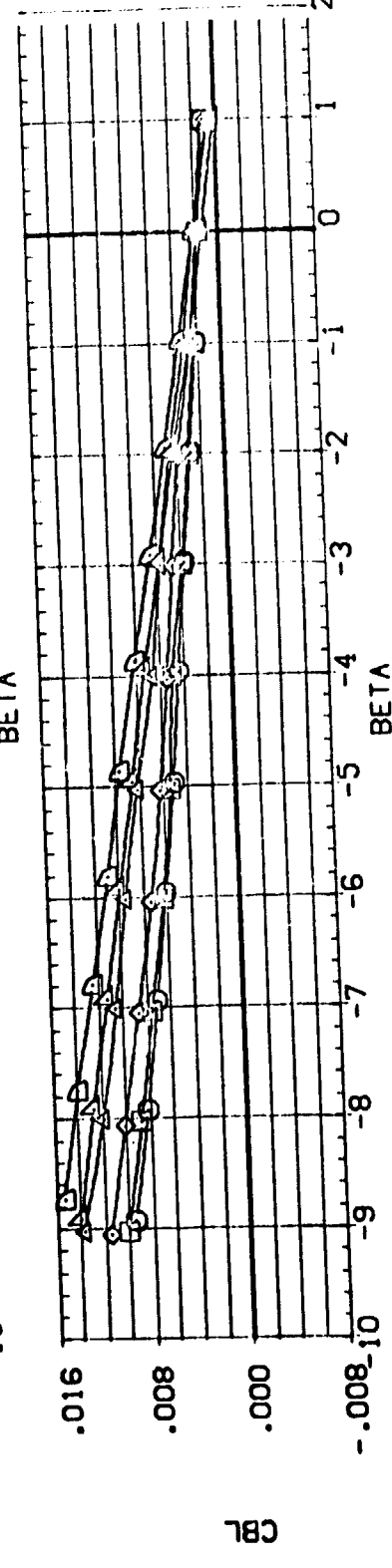
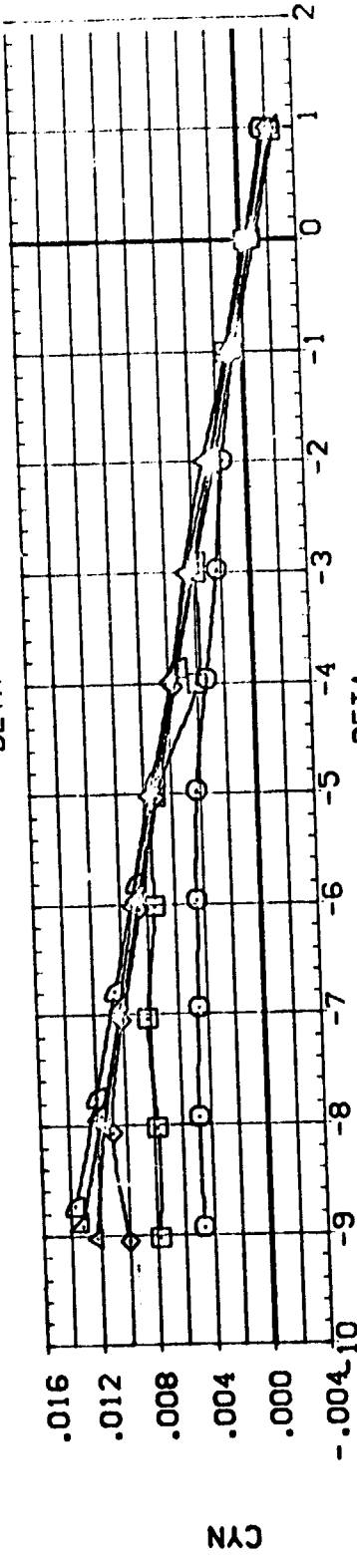
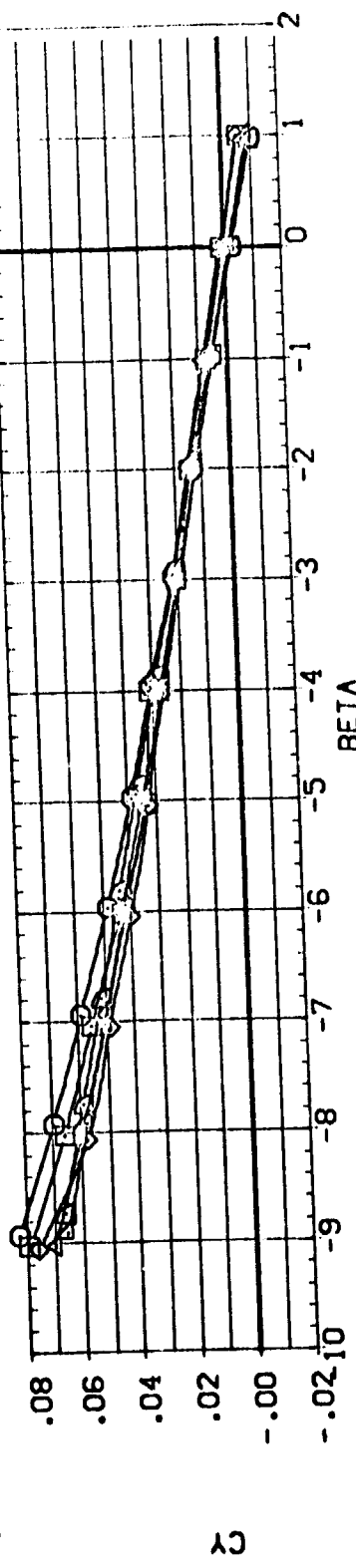
ALPHA 10.000
 15.000
 20.000
 25.000
 30.000
 35.000

ELEVTR -30.000
 -30.000
 -30.000
 -30.000
 -30.000
 -30.000

AILERON 10.000
 10.000
 10.000
 10.000
 10.000
 10.000

BDFLAP -14.250
 -14.250
 -14.250
 -14.250
 -14.250
 -14.250

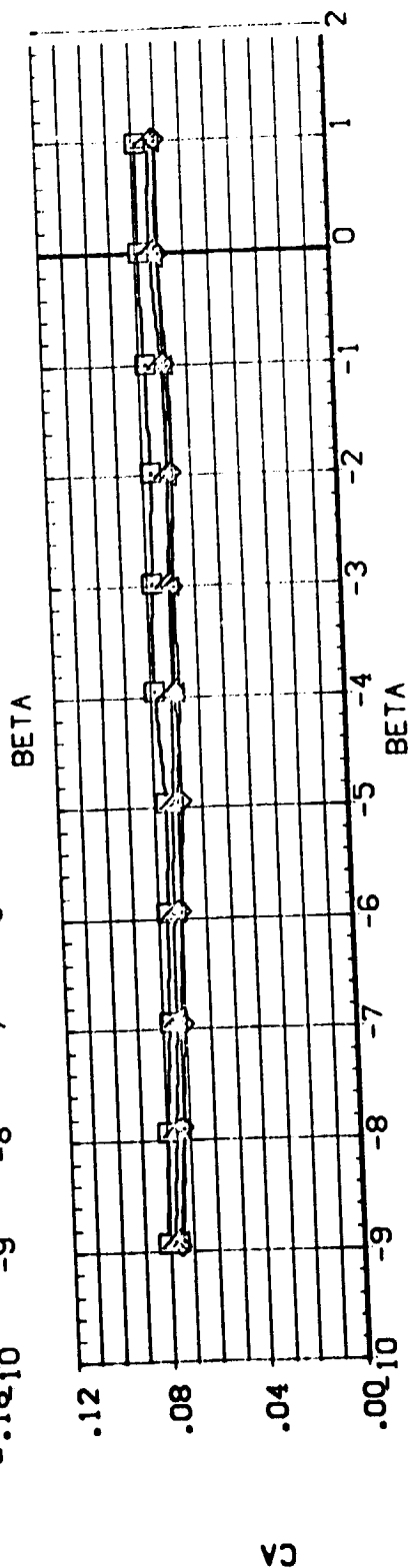
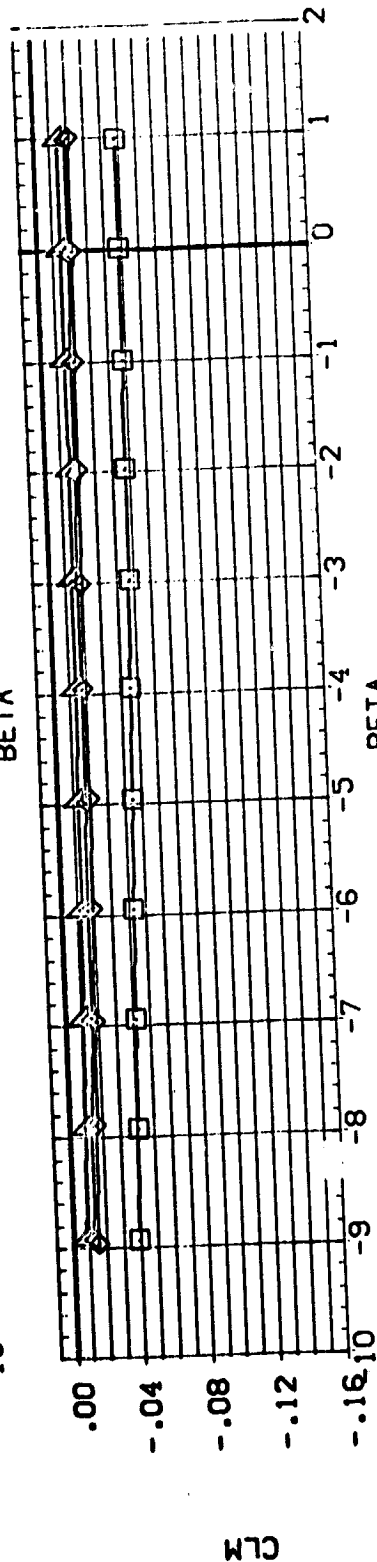
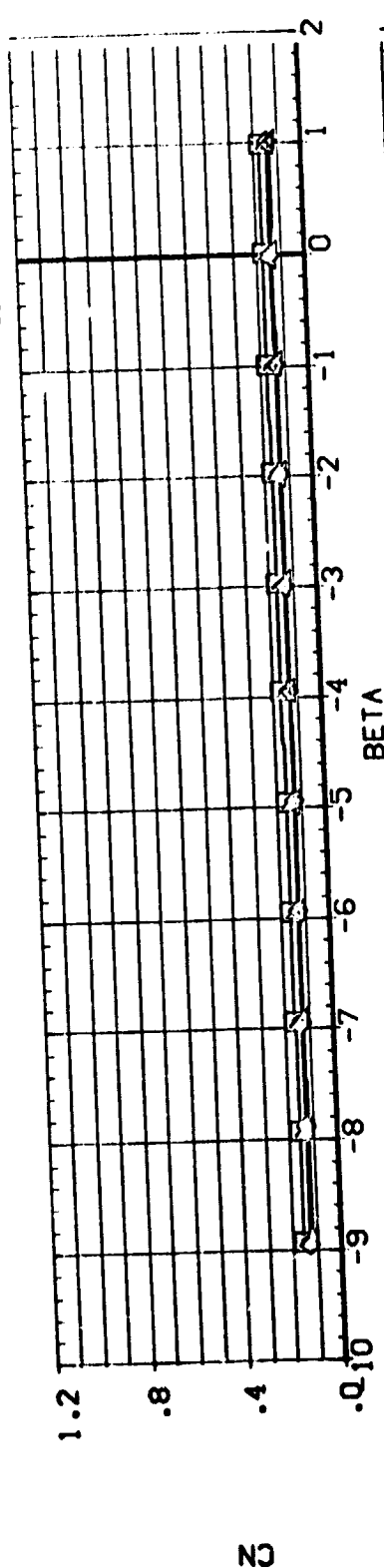
REFERENCE INFORMATION
 SPREF 21.7885
 LPREF 3.5511
 BRPF 7.0025
 XMRP 6.2022
 YMRP .0000
 ZMRP .0075
 SCALE



BASIC AERODYNAMIC CHARACTERISTICS IN SIDESLIP (ELEVATOR=-30,AILERON= 10)

(A)MACH = 10.30

DATA SET SYMBOL	CONFUSION	DESCRIPTION	ALPHA	ELEVTR	AIRLON	BOFLAP	REFERENCE INFORMATION
[RPO040]	CFT S6	ROCKWELL C8B	0.000	10.000	.000	-14.250	SREF 2.7886
[RPO011]	CFT S6	ROCKWELL C8B	0.000	-10.000	.000	-14.250	LREF 3.5951
[RPO019]	CFT S6	ROCKWELL C8B	0.000	-20.000	.000	-14.250	SREF 7.0025
[RPO027]	CFT S6	ROCKWELL C8B	0.000	-40.000	.000	-14.250	XMRP 6.700000
			0.000	-60.000	.000	-14.250	YMRP 6.700000
			0.000	-80.000	.000	-14.250	ZMRP 6.700000
			0.000	-100.000	.000	-14.250	SCALE .00075

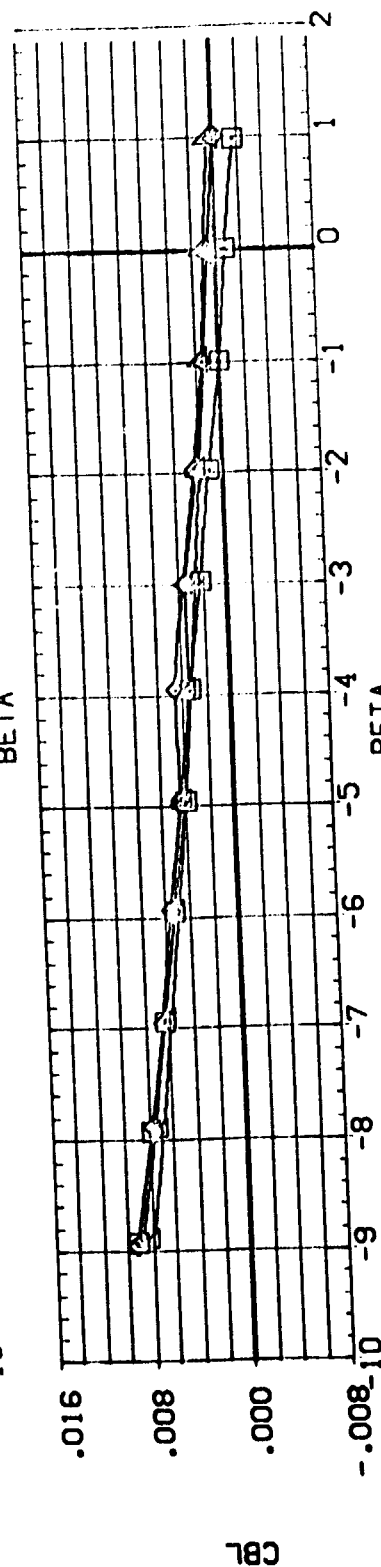
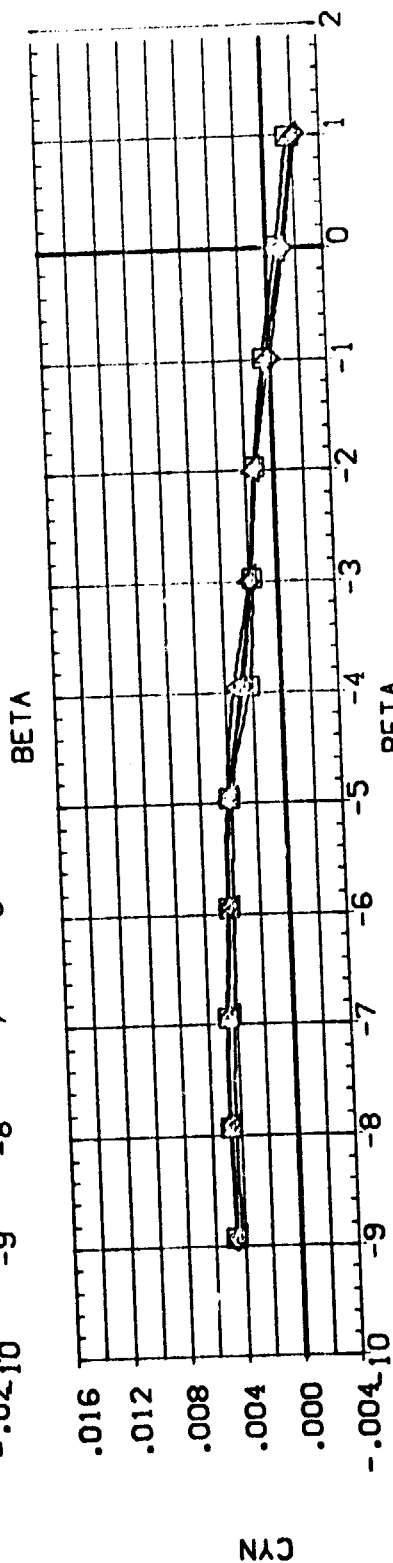
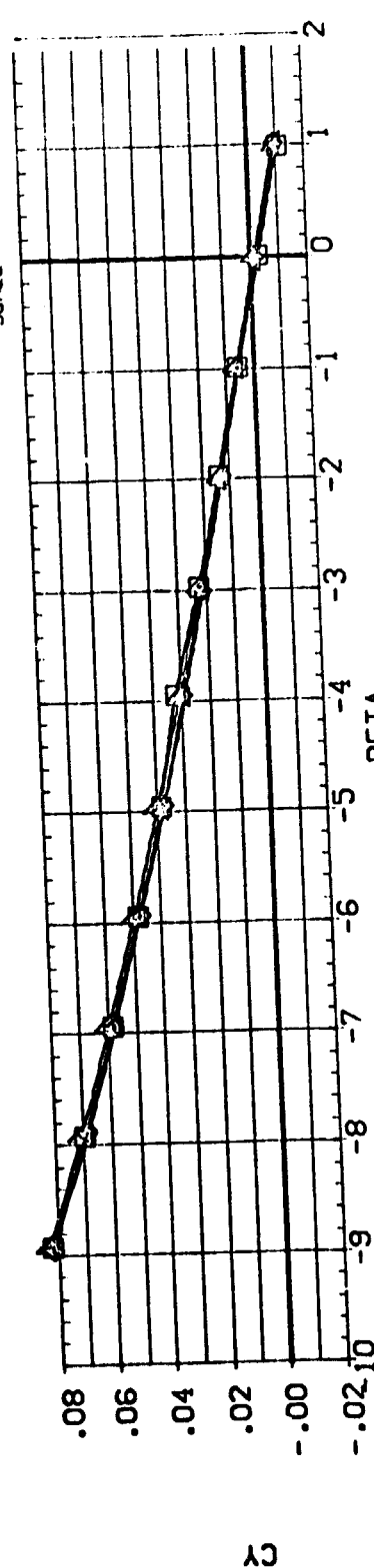


EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 10 DEG.)

(A)MACH = 10.30

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BOFLAP	AILERON	ELEVATOR	ALPHA
(RPO040)	LA-11:CFHT 95. ROCKWELL CRB. 0899 V/MCD. NOSE	-14.250	.000	10.000	10.000
(RPO011)	LA-11:CFHT 95. ROCKWELL CRB. 0899 V/MCD. NOSE	-14.250	.000	-10.000	10.000
(RPO019)	LA-11:CFHT 95. ROCKWELL CRB. 0899 V/MCD. NOSE	-14.250	.000	-20.000	10.000
(RPO027)	LA-11:CFHT 95. ROCKWELL CRB. 0899 V/MCD. NOSE	-14.250	.000	-40.000	10.000

REFERENCE INFORMATION	SCALE
SPREF 21.7885	.0075
LRREF 3.5611	.0000
XRREF 7.0251	.0000
YMRP 6.2802	.0000
ZMRP .0000	.0000

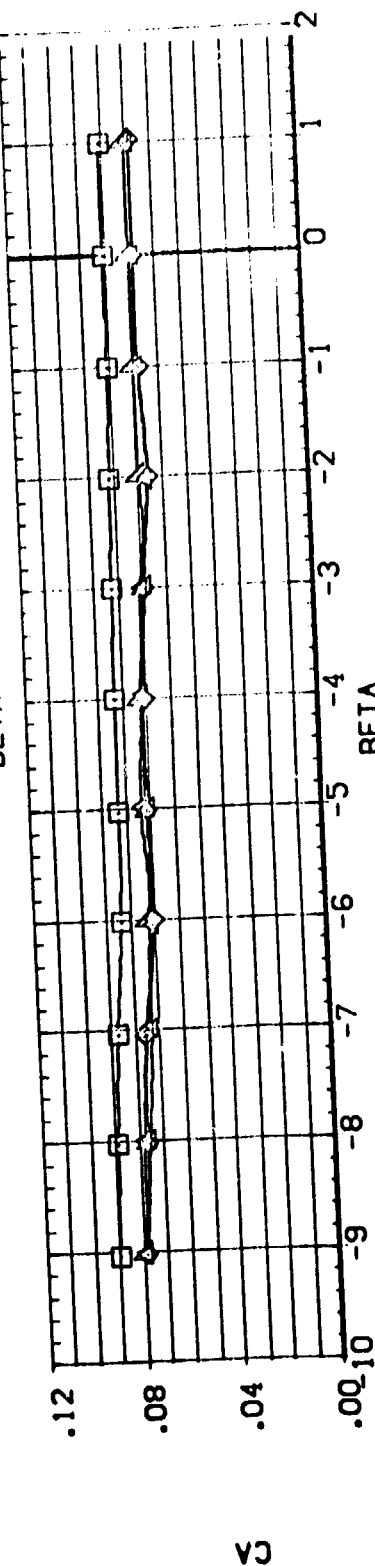
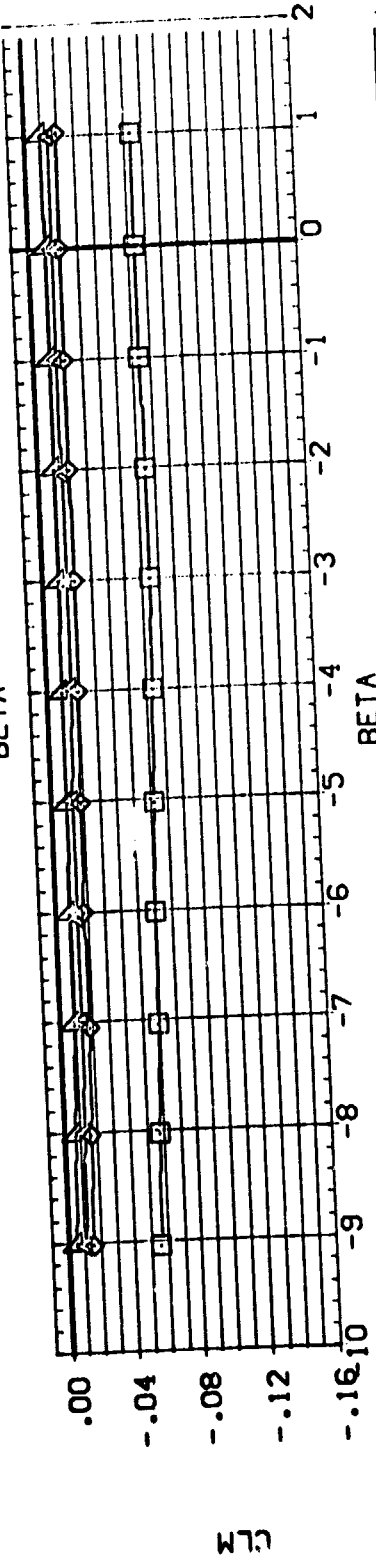
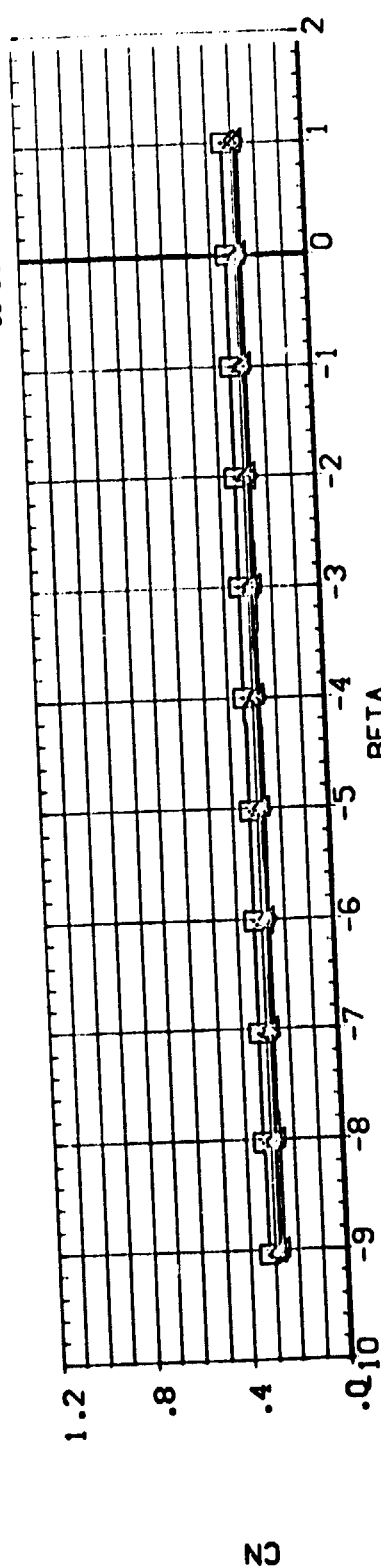


EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 10 DEG.)

(A)MACH = 10.30



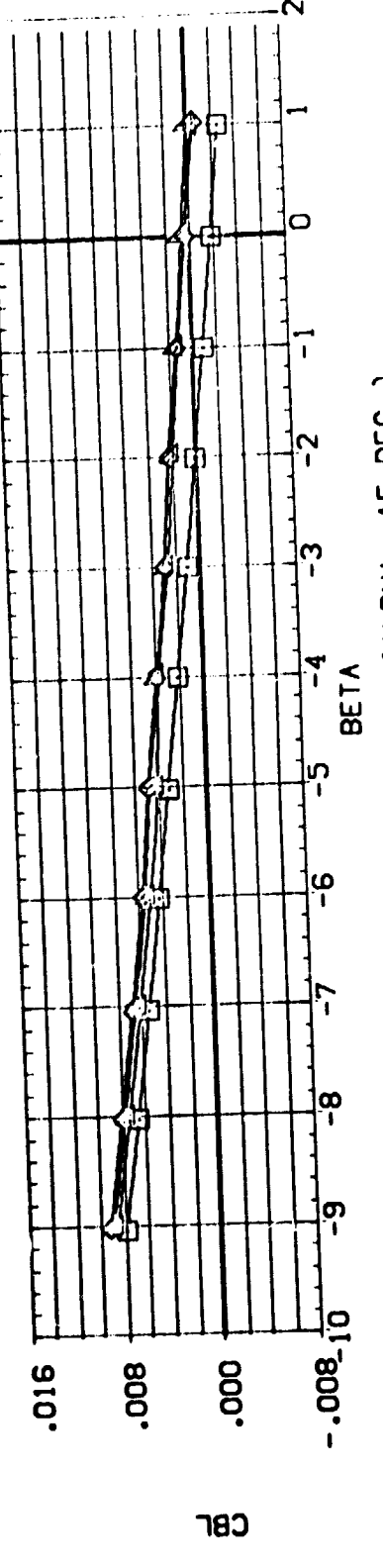
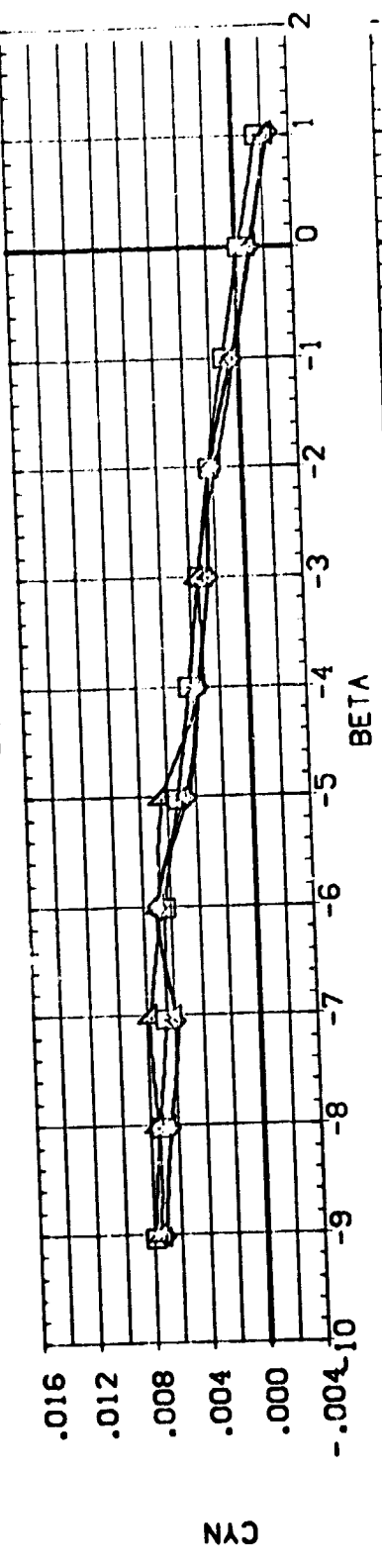
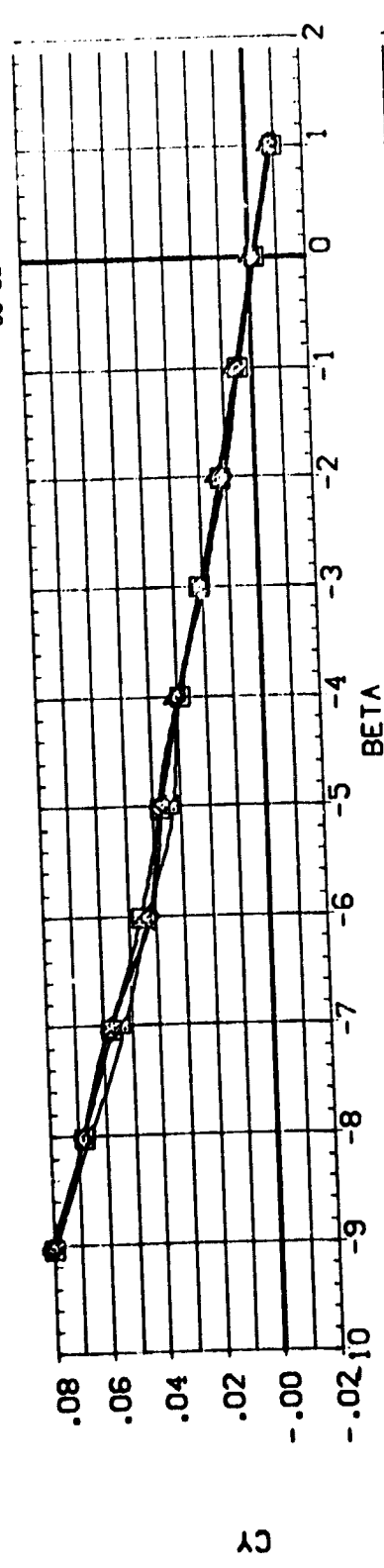
DATA SET SYMBOL: [RPO039] [RPO012] [RPO020] [RPO028]
CONFIGURATION DESCRIPTION: LA-11: CHT 56: ROCKWELL C-8B: C-8B V/MOD: NOSE
LA-11: CHT 56: ROCKWELL C-8B: C-8B V/MOD: NOSE
LA-11: CHT 56: ROCKWELL C-8B: C-8B V/MOD: NOSE
LA-11: CHT 56: ROCKWELL C-8B: C-8B V/MOD: NOSE
REFERENCE INFORMATION: SREF: 21.7886 SC: 1.5
LREF: 3.561 SC: 1.5
BREF: 7.025 SC: 1.5
XMRP: 6.2322 SC: 1.5
YMRP: .0000 SC: 1.5
ZMRP: .0000 SC: 1.5
SCALE: .0075



EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 15 DEG.)

MACH = 10.30

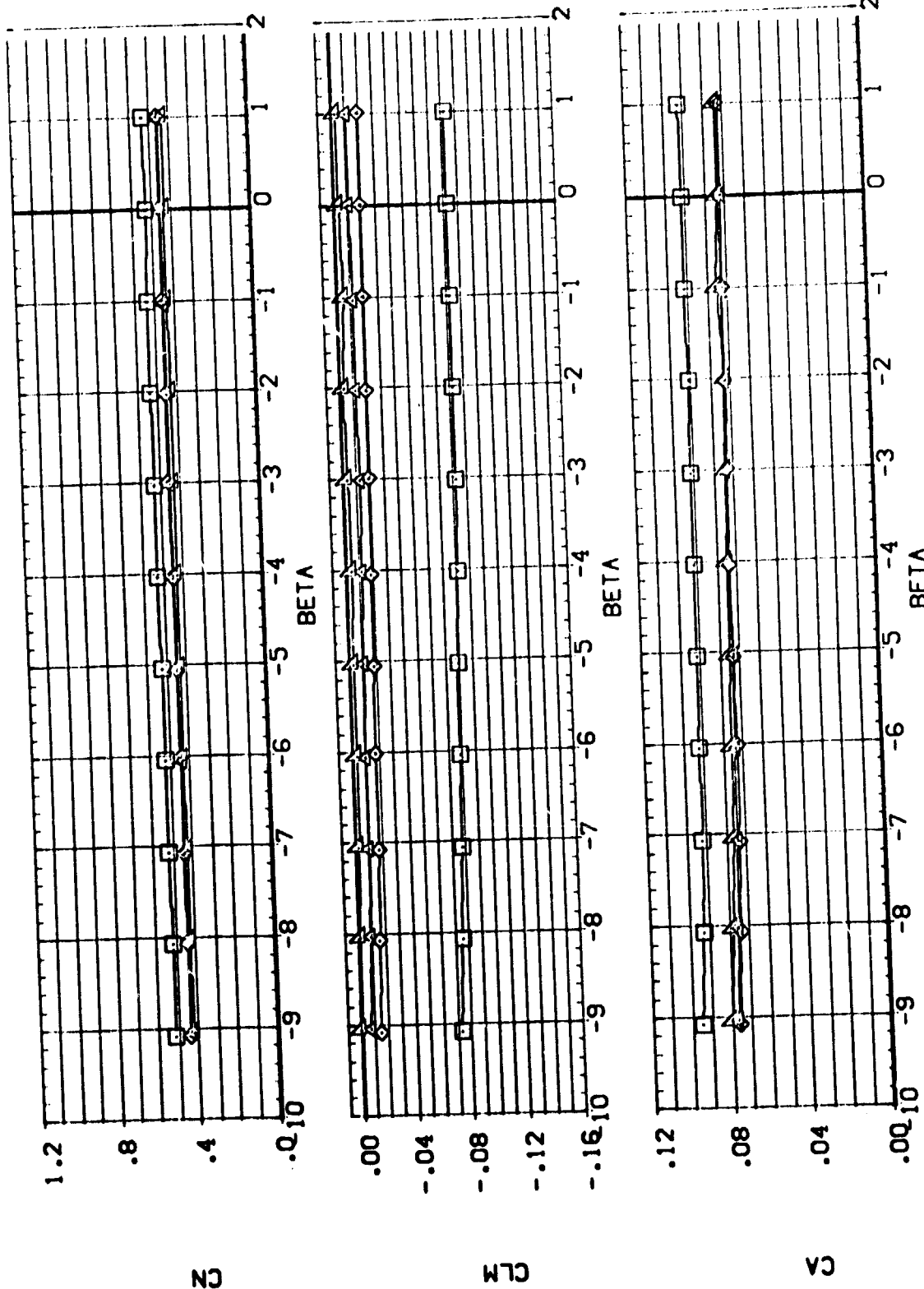
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AILERON	BOFLAP	REFERENCE INFORMATION
[RPO009]	LA-111 CFHT 96: ROCKWELL C8B: 0899 V/MCD: NOSE	15.000	10.000	.000	-14.250	SREF 21.7885
[RPO012]	LA-111 CFHT 96: ROCKWELL C8B: 0899 V/MCD: NOSE	15.000	-10.000	.000	-14.250	UREF 3.5511
[RPO020]	LA-111 CFHT 96: ROCKWELL C8B: 0899 V/MCD: NOSE	15.000	-20.000	.000	-14.250	BREF 7.0251
[RPO028]	LA-111 CFHT 96: ROCKWELL C8B: 0899 V/MCD: NOSE	15.000	-40.000	.000	-14.250	XMRP 6.2722
						ZMRP .0000
						SCALE .0075



EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 15 DEG.)

(A) MACH = 10.30

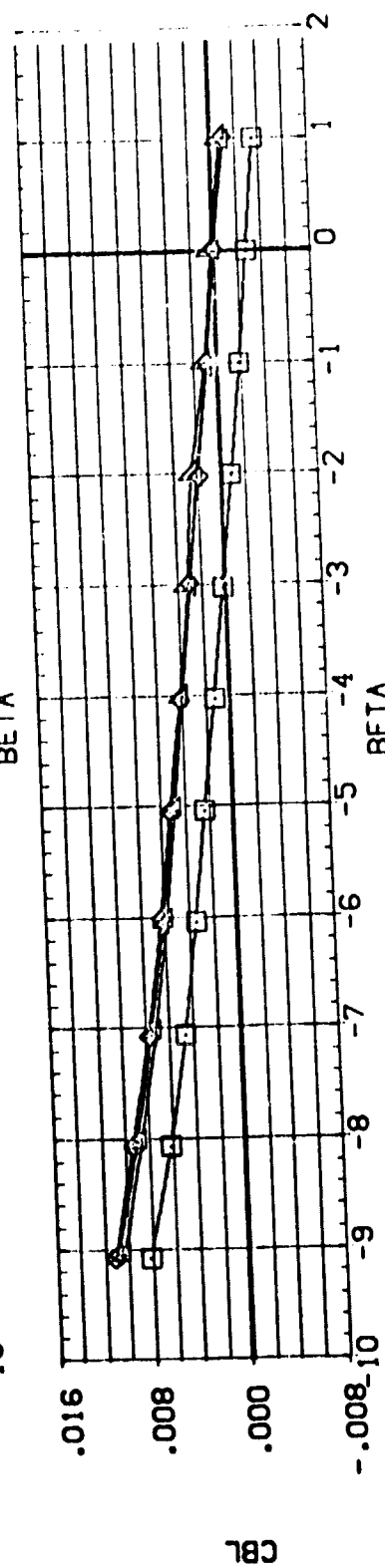
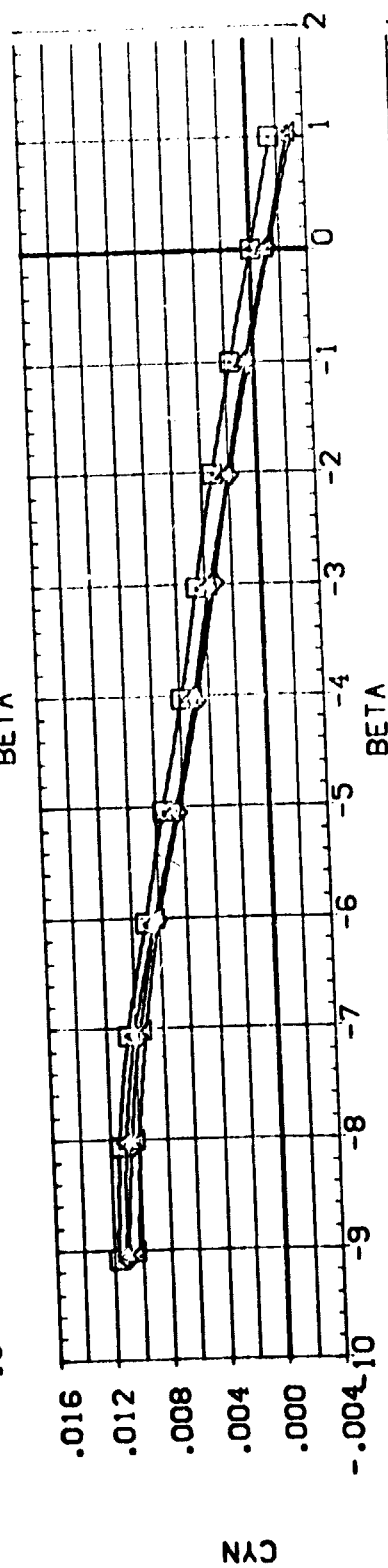
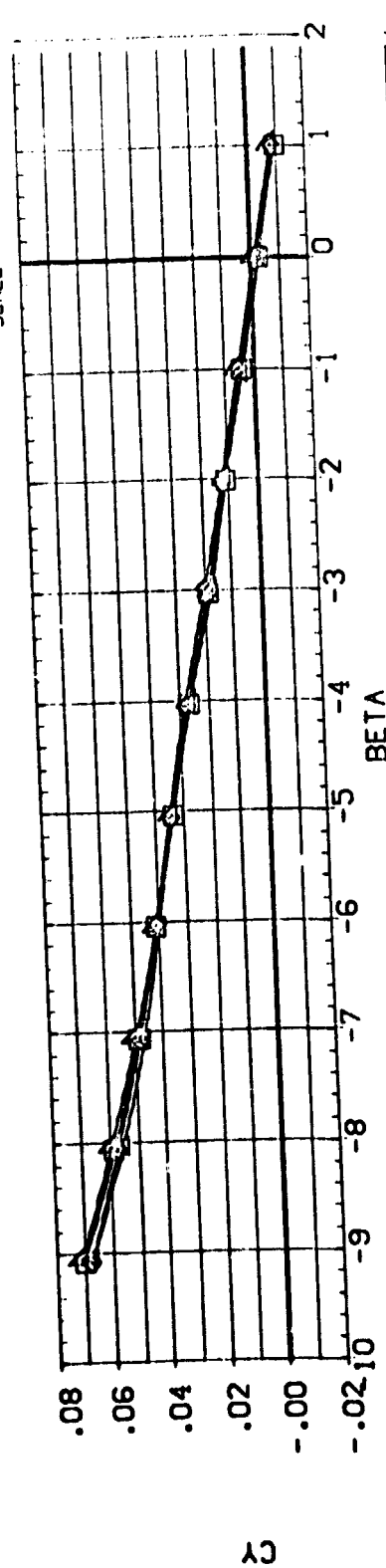
DATA SET SYMC.	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AIRLON	BOFLAP	REFERENCE INFORMATION
[R00000]	LA-11: CHT 55: ROCKWELL C59: C888 V/MOD: NOSE	20.000	10.000	.000	-14.250	SREF 21.7885
[R00001]	LA-11: CHT 55: ROCKWELL C59: C888 V/MOD: NOSE	20.000	-10.000	.000	-14.250	LREF 3.5511
[R00002]	LA-11: CHT 55: ROCKWELL C59: C888 V/MOD: NOSE	20.000	-20.000	.000	-14.250	BREF 7.0251
[R00003]	LA-11: CHT 55: ROCKWELL C59: C888 V/MOD: NOSE	20.000	-40.000	.000	-14.250	XPBP 6.2832
						ZBP .0000
						SCALE .0015



EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 20 DEG.)

(A) YACH = 10.30

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVTR	AIRLON	BOELAP	REFERENCE INFORMATION
[R0038]	LA-11-CEHT 95: ROCKWELL CR9	20.000	10.000	.000	-14.200	SREF 2.7886
[R0013]	LA-11-CEHT 95: ROCKWELL CR9	20.000	-10.000	.000	-14.200	LREF 3.5621
[R0021]	LA-11-CEHT 95: ROCKWELL CR9	20.000	-20.000	.000	-14.200	XREF 7.0622
[R0029]	LA-11-CEHT 95: ROCKWELL CR9	20.000	-40.000	.000	-14.200	YREF 6.2802
						ZREF 0.0000
						NREF 0.0000
						SCALE 0.0075

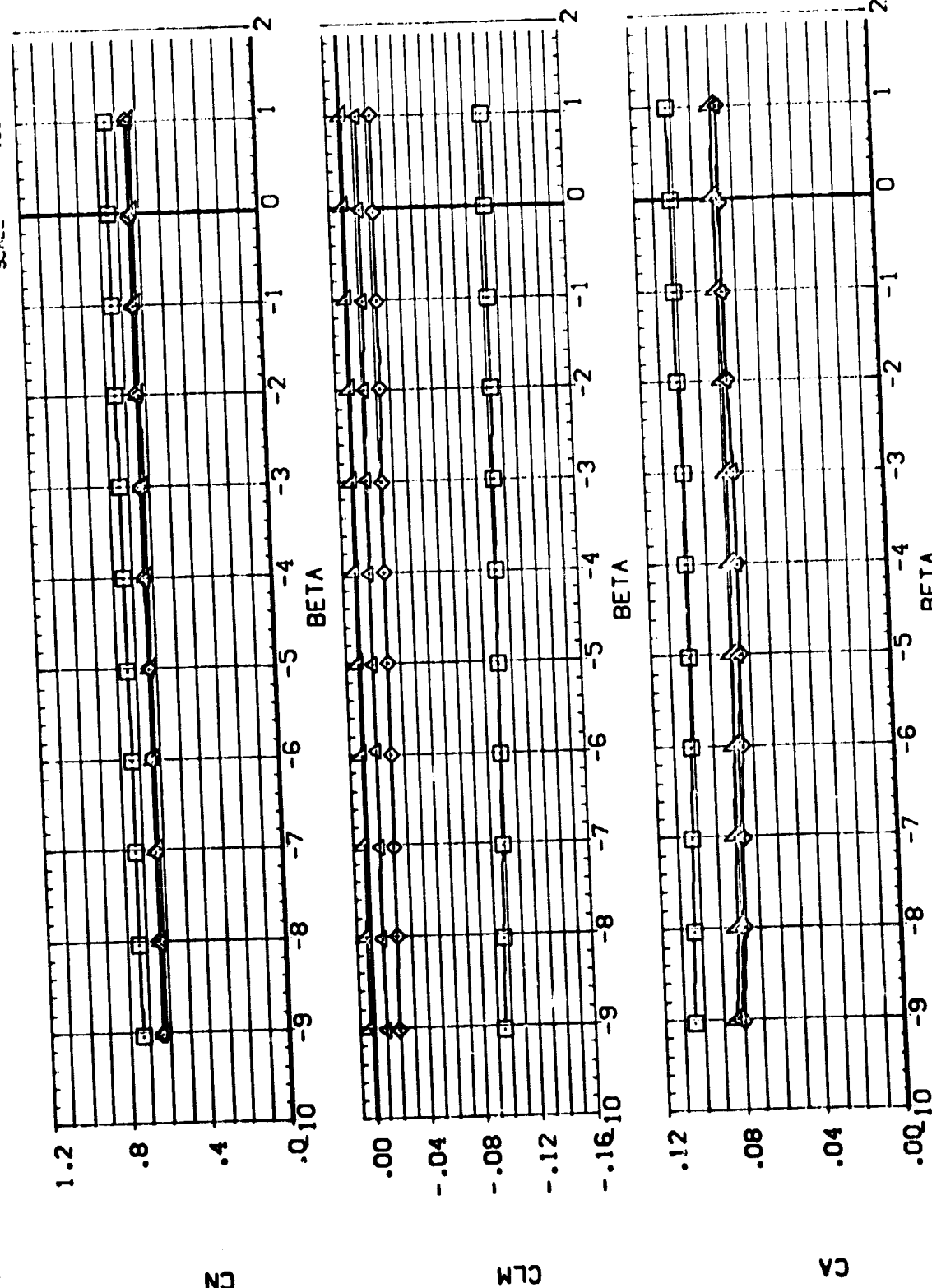


EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 20 DEG.)

CA)MACH = 10.30



DATA SET SYMBOL: [RP0037] [RP0014] [RP0022] [RP0030]
CONFIGURATION DESCRIPTION: LA-111: CFHT 96: ROCKWELL CRB: 0899 V/MOD: NOSE
LA-111: CFHT 96: ROCKWELL CRB: 0899 V/MOD: NOSE
LA-111: CFHT 96: ROCKWELL CRB: 0899 V/MOD: NOSE
LA-111: CFHT 96: ROCKWELL CRB: 0899 V/MOD: NOSE
REFERENCE INFORMATION: SPREF 21.7886 SCALING 1.0000
LREF 3.5611 LREF 1.0000
BREF 7.0261 BREF 1.0000
XREF 6.2222 XREF 1.0000
YREF 0.0000 YREF 1.0000
SCALE 0.0075



EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 25 DEG.)

(A)MACH = 10.30

DATA SET SYMBOL: [RP0037] [RP0014] [RP0022] [RP0030]

CONFIGURATION DESCRIPTION: LA-11: CFHT 96: ROCKWELL CFB: 0898 V/MOD: NOSE
LA-11: CFHT 96: ROCKWELL CFB: 0898 V/MOD: NOSE
LA-11: CFHT 96: ROCKWELL CFB: 0898 V/MOD: NOSE
LA-11: CFHT 96: ROCKWELL CFB: 0898 V/MOD: NOSE

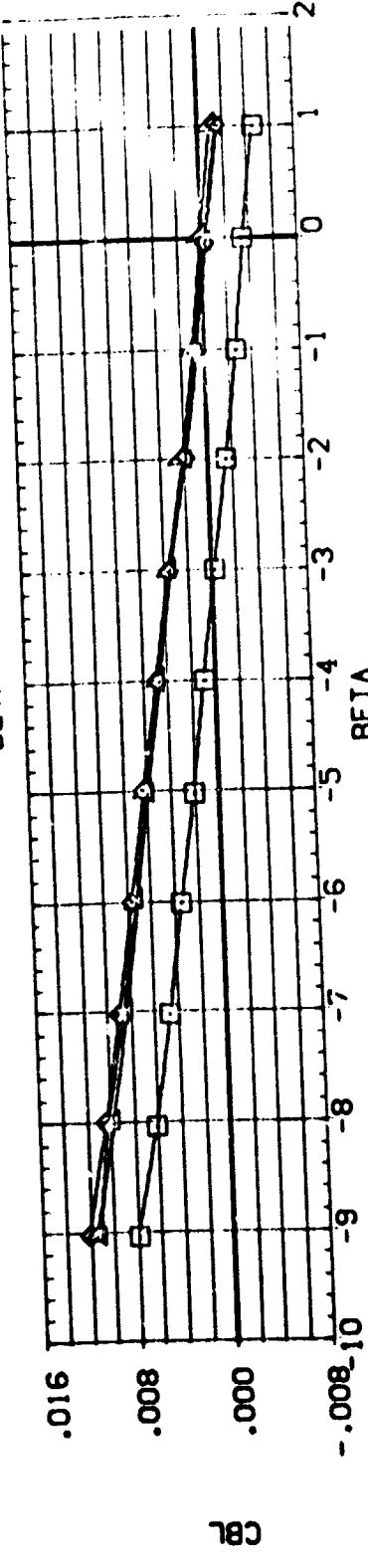
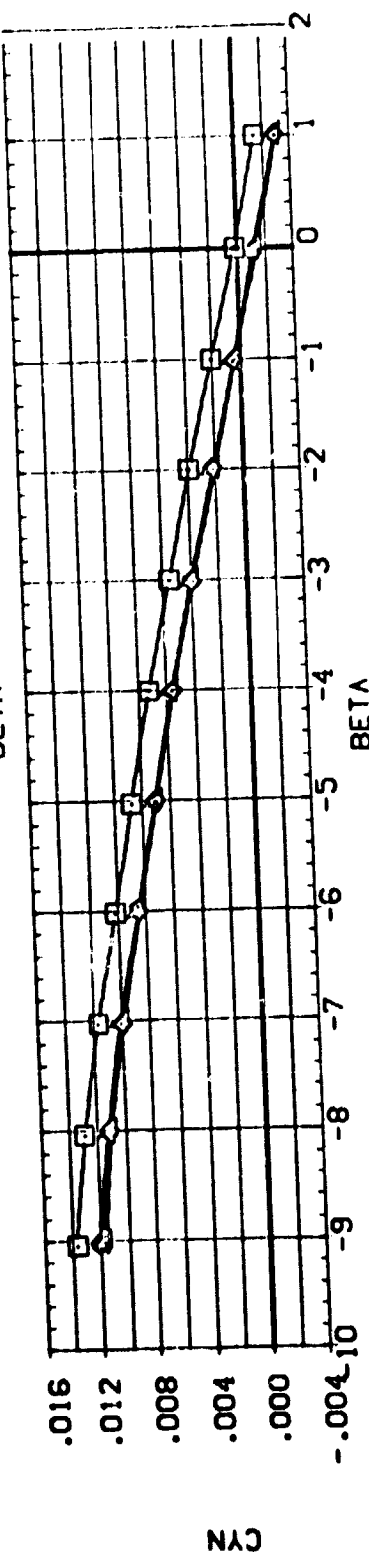
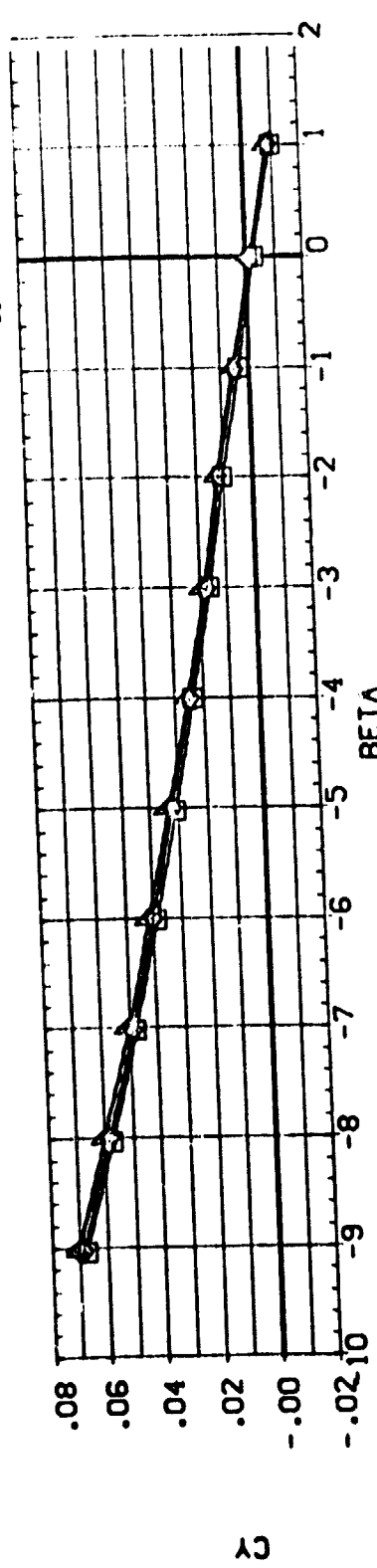
ALPHA: 25.000 25.000 25.000 25.000

ELEVTR: 10.000 -10.000 -20.000 -40.000

AIRFOV: 0.000 0.000 0.000 0.000

BOFLAP: -14.250 -14.250 -14.250 -14.250

REFERENCE INFORMATION: SREF: 21.7885 SREF: 21.7885
LREF: 7.5511 LREF: 7.5511
BREF: 7.0220 BREF: 7.0220
XREF: 6.2822 XREF: 6.2822
YREF: 0.0000 YREF: 0.0000
ZREF: 0.0000 ZREF: 0.0000
SCALE: 0.0005



EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 25 DEG.)

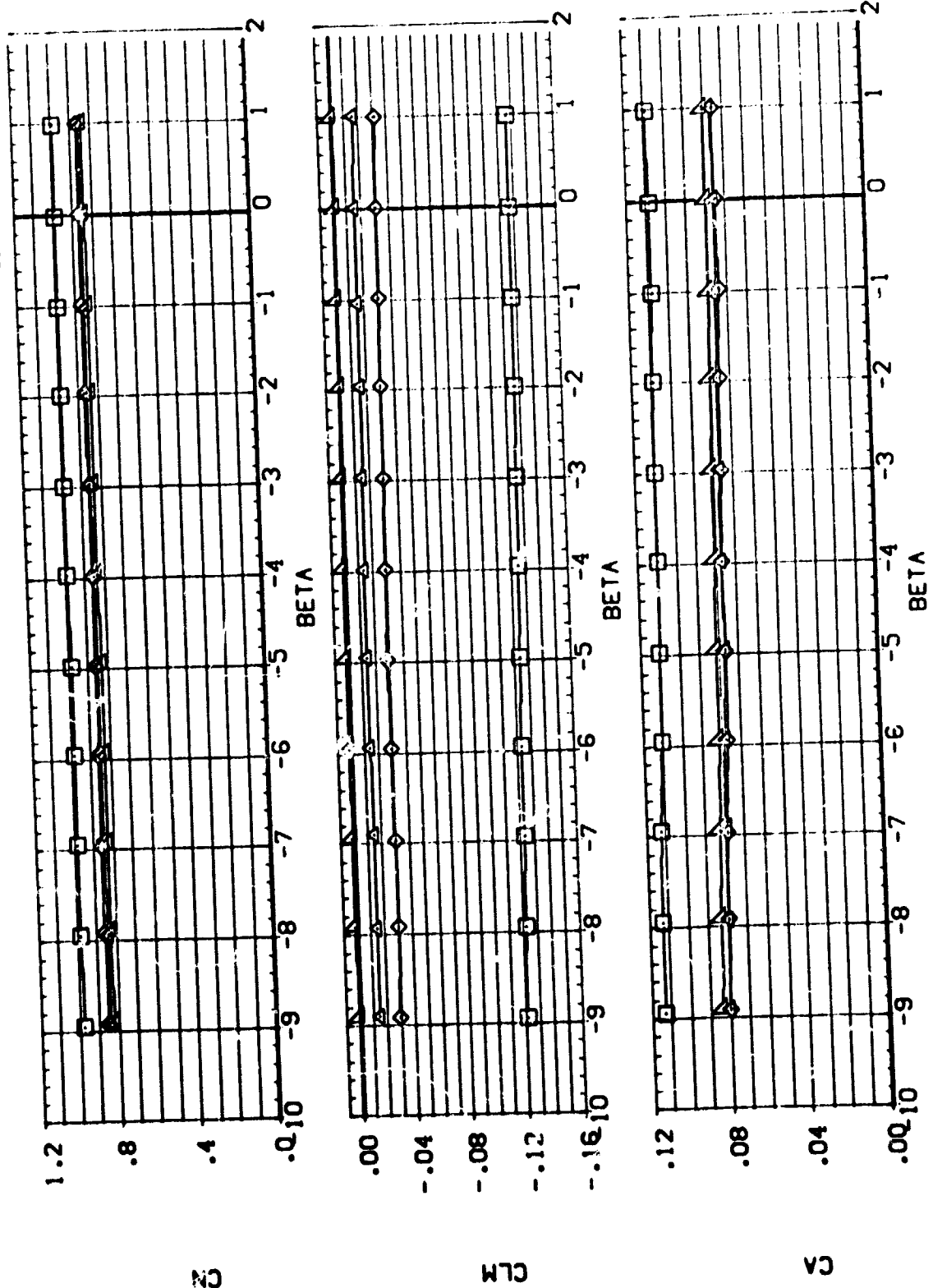
(A)MACH = :0.30



DATA SET SYMBOL: [8P0006] [8P0015] [8P0023] [8P0031]

CONFIGURATION DESCRIPTION: LA-11: CFHT SS: ROCKWELL C-8. 0899 V/30: NOISE
LA-11: CFHT SS: ROCKWELL C-8. 0899 V/30: NOISE
LA-11: CFHT SS: ROCKWELL C-8. 0899 V/30: NOISE
LA-11: CFHT SS: ROCKWELL C-8. 0899 V/30: NOISE

REFERENCE INFORMATION: ALPHA 30.000 30.000 30.000 30.000
ELEVTR 10.000 10.000 10.000 10.000
AIRTON .000 .000 .000 .000
BOFLAP -14.250 -14.250 -14.250 -14.250
SREF 21.7886 3.5611 7.0262 6.0000
LREF 3.5611 7.0262 6.0000 6.0000
XREF 3.5611 7.0262 6.0000 6.0000
YREF 3.5611 7.0262 6.0000 6.0000
ZREF 3.5611 7.0262 6.0000 6.0000
SCALE .0075



EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 30 DEG.)

DATA SET SYMBOL: [RP0036] [RP0015] [RP0023] [RP0031]

CONFIGURATION DESCRIPTION: LA-11 CFHT 56. ROCKWELL CRB. 0898 V/MCD. NOSE
 LA-11 CFHT 56. ROCKWELL CRB. 0899 V/MCD. NOSE
 LA-11 CFHT 56. ROCKWELL CRB. 0899 V/MCD. NOSE
 LA-11 CFHT 56. ROCKWELL CRB. 0899 V/MCD. NOSE

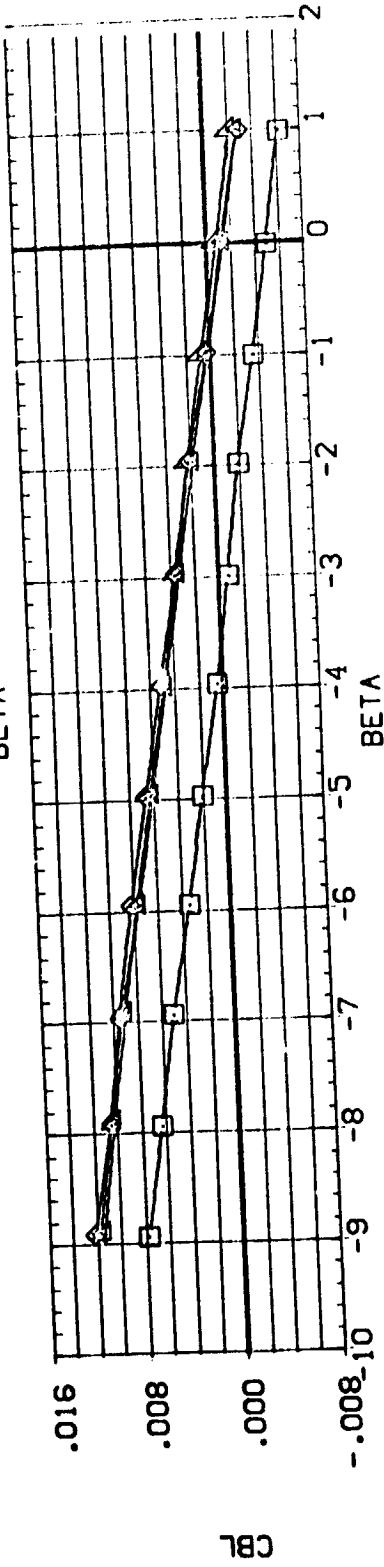
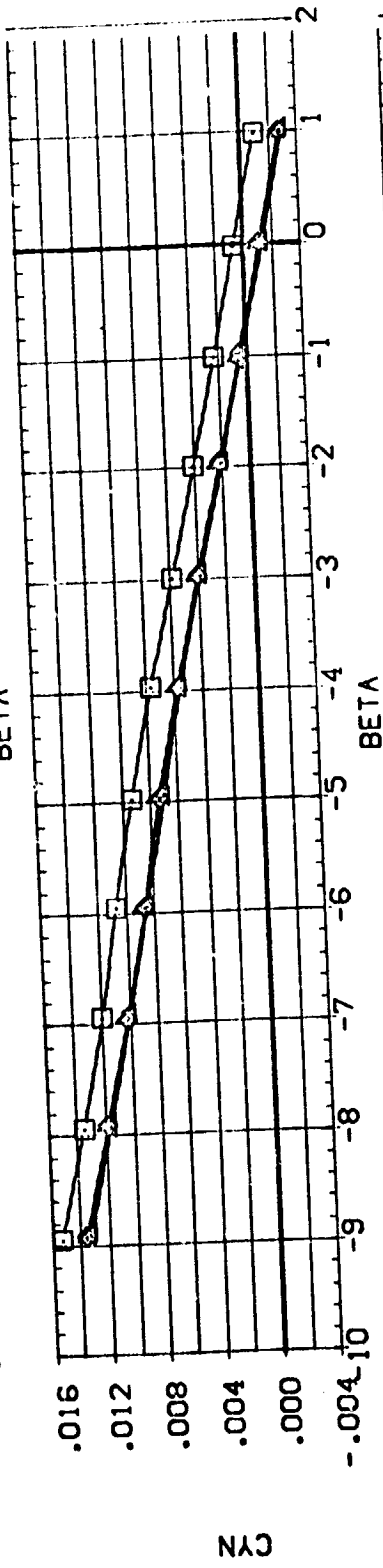
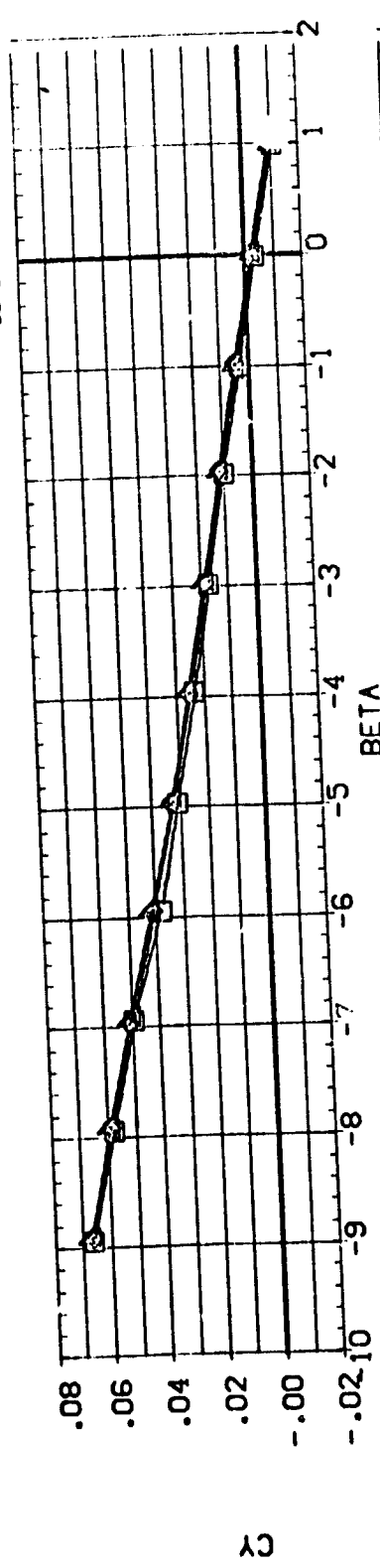
ALPHA: 30.000 30.000 30.000 30.000

ELEVTR: 10.000 -10.000 -20.000 -40.000

AILERON: .000 .000 .000 .000

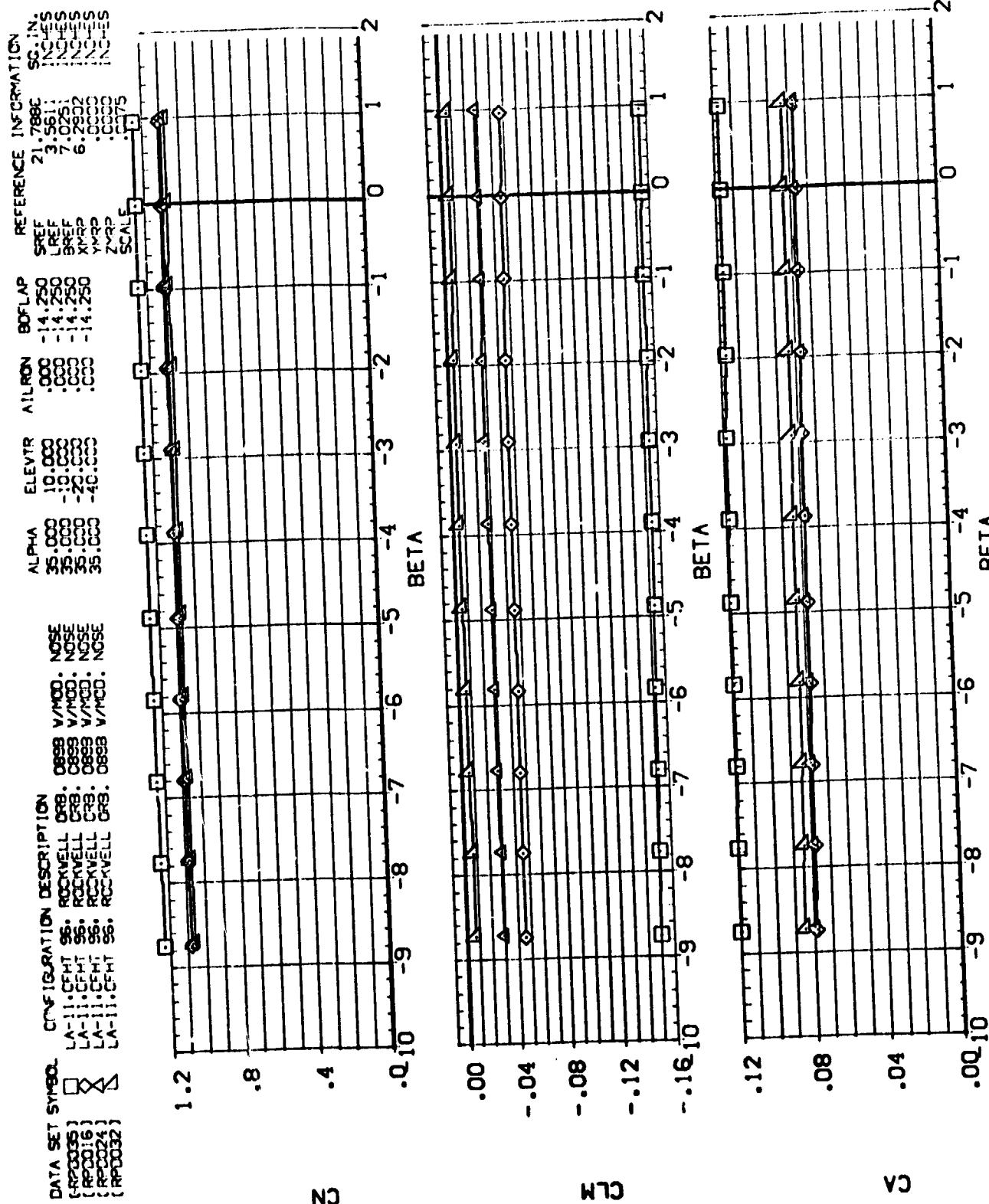
BOFLAP: -14.250 -14.250 -14.250 -14.250

REFERENCE INFORMATION: SREF 21.7885 SREF 21.7885
 LREF 3.5611 LREF 3.5611
 BREF 7.0251 BREF 7.0251
 XMRP 6.2602 XMRP 6.2602
 YMRP .0000 YMRP .0000
 ZMRP .0000 ZMRP .0000
 SCALE .0075



EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 30 DEG.)

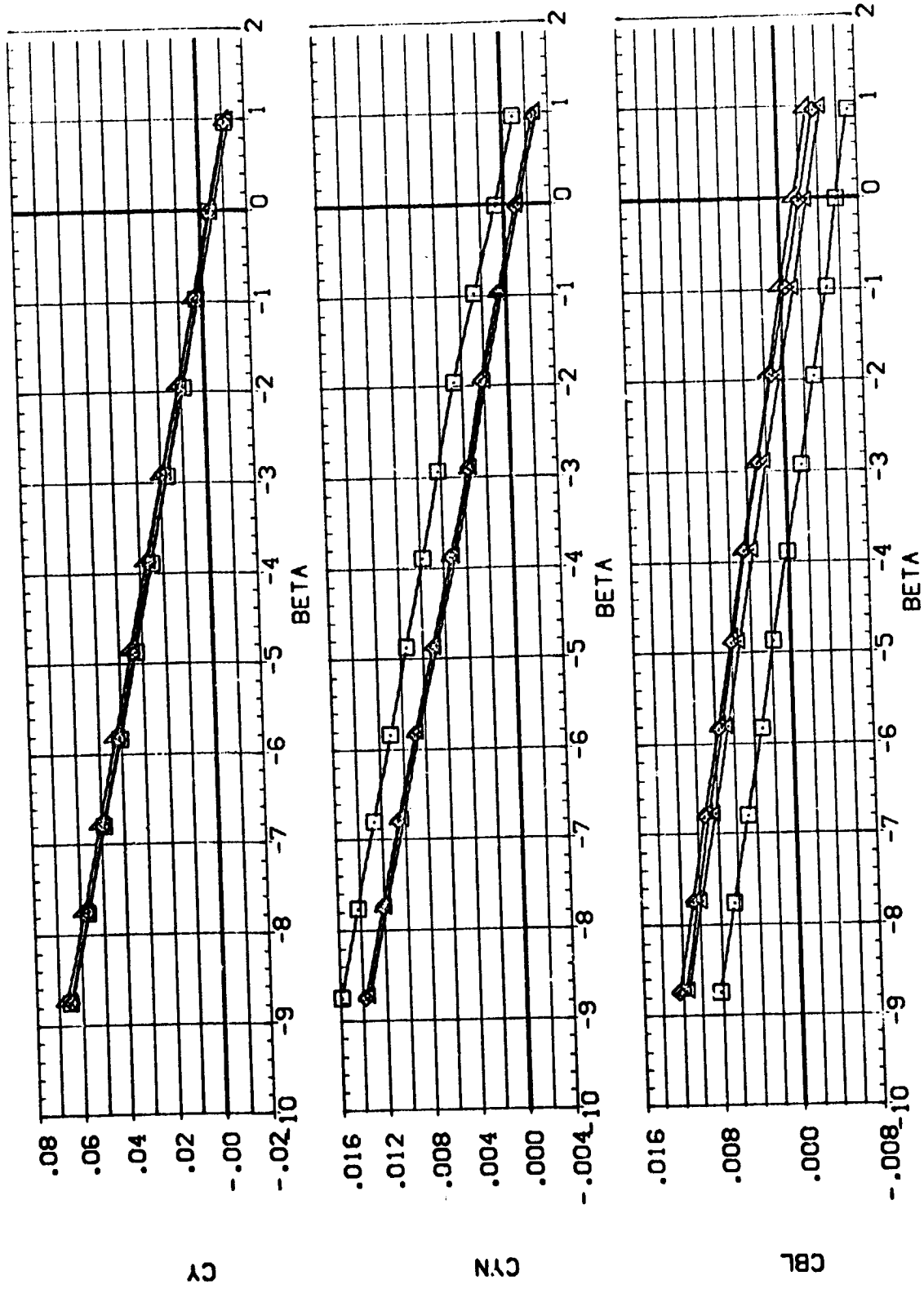
(A)MACH = 10.30



PAGE 43

$\{A\}_{MACH} = 10.30$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
[RPO035]	LA-11:CFHT 56: ROCKWELL CR8: 0893 V/100: NOSE	SC:IN: 21.7886
[RPO016]	LA-11:CFHT 56: ROCKWELL CR8: 0893 V/100: NOSE	INCHES 3.5511
[RPO024]	LA-11:CFHT 56: ROCKWELL CR8: 0893 V/100: NOSE	INCHES 7.0251
[RPO032]	LA-11:CFHT 56: ROCKWELL CR8: 0893 V/100: NOSE	INCHES 6.2832
		INCHES .0000
		INCHES .0000
		INCHES .0075
		SCALE



EFFECT OF CONTROL DEFLECTIONS IN SIDESLIP (ALPHA= 35 DEG.)

(A)MACH = 10.30

APPENDIX
TABULATED SOURCE DATA

Plotted data listings available on request
from the Data Management System.



DATE 10 SEP 73

TABULATED SOURCE DATA - CPHT96 (LA-11)

LA-11, CPHT 96, ROCKWELL ORB. D898 W/MOD. NOSE

(RPF001) (15 AUG 73)

PARAMETRIC DATA

REFERENCE DATA

SREF = 21.7886 SQ. IN. XREF = 6.2902 INCHES
LREF = 3.5611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

BETA = .000 ELEVTR = .000
AILRON = .000 BDFLAP = -14.250

RUN NO. 4/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	9.967	-0.0090	.14959	.06941	-.02601	.00057	-.00105	-.00159	.13529	.09450	1.43462
10.300	14.991	-.00337	.26902	.06818	-.00036	.00024	-.00100	-.00224	.26155	.14062	1.86004
10.300	20.169	-.00302	.46931	.07551	-.03617	-.00022	-.00109	-.00229	.41450	.23269	1.78136
10.300	25.311	-.00319	.67296	.07912	-.05009	-.00061	-.00106	-.00278	.57453	.35923	1.59935
10.300	30.126	-.00417	.86230	.08029	-.06499	-.00147	-.00099	-.00350	.72283	.51227	1.41102
10.300	35.222	-.00626	1.12563	.08478	-.08878	-.00241	-.00085	-.00548	.87066	.71846	1.21183
GRADIENT		-.00008	.03662	-.00066	-.00237	-.00012	.00001	-.00013	.02954	.02466	-.01490

(RPF002) (15 AUG 73)

LA-11, CPHT 96, ROCKWELL ORB. D898 W/MOD. NOSE

PARAMETRIC DATA

REFERENCE DATA

SREF = 21.7886 SQ. IN. XREF = 6.2902 INCHES
LREF = 3.5611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

BETA = -5.000 ELEVTR = .000
AILRON = .000 BDFLAP = -14.250

RUN NO. 5/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	9.967	-4.92463	.14317	.06931	-.02671	.00036	-.00375	.00908	.12901	.09304	1.38635
10.300	15.240	-4.98651	.30056	.07436	-.03178	.00407	.00446	.04406	.27027	.19070	1.79335
10.300	20.192	-5.00773	.47972	.07760	-.03853	.00561	.00571	.09080	.42345	.23642	1.77612
10.300	25.280	-4.98666	.66215	.07974	-.04907	.00691	.00684	.09035	.58290	.36321	1.60487
10.300	30.109	-4.92916	.90191	.08368	-.06436	.00844	.00686	.05814	.73814	.52501	1.40596
10.300	35.296	-4.62714	1.16356	.08817	-.09031	.00849	.00685	.06315	.89870	.74429	1.20746
GRADIENT		.00363	.04030	-.00071	-.00242	.00023	.00014	.00092	.03068	.02552	-.01248

DATE 10 SEP 73

TABLED SOURCE DATA - CFT96 (LA-11)

LA-11, CFT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

PARAMETRIC DATA

ALPHA = 10.000 ELEVTR = .000
ATLORN = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7666 58.1N. XREF = 6.2902 INCHES
LREF = 3.9611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 11/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CLB	CN	CY	CL	CD	L/D
10.300	-6.929	9.92130	.13618	.07797	-.02440	.00635	.00439	.06148	.12268	.10561	1.21933
10.300	-7.075	9.94559	.13645	.07505	-.02594	.00714	.00454	.06864	.12341	.09784	1.26138
10.300	-6.932	9.97990	.13955	.07348	-.02681	.00580	.00457	.06001	.12471	.09655	1.29159
10.300	-5.956	9.96916	.14126	.07246	-.02795	.00474	.00421	.04696	.12655	.09586	1.32013
10.300	-4.971	10.00827	.14058	.07116	-.02880	.00366	.00388	.03950	.12607	.09451	1.33401
10.300	-3.970	10.01792	.14539	.07286	-.02885	.00330	.00205	.03286	.13050	.09705	1.34474
10.300	-2.975	10.03305	.14713	.07502	-.02989	.00242	.00129	.02342	.13216	.09753	1.35506
10.300	-1.999	10.03472	.14562	.07078	-.02925	.00160	.00192	.01396	.13106	.09507	1.37850
10.300	-0.979	10.04440	.14886	.07172	-.02997	.00056	-.00027	.00909	.13407	.09659	1.38807
10.300	-0.074	10.04005	.15031	.07318	-.03107	.00038	-.00153	.00067	.13525	.09827	1.37635
10.300	.991	10.03345	.14982	.07301	-.03099	.00010	-.00265	-.00720	.13480	.09800	1.37559
10.300	GRADIENT	.00472	.00141	.00018	-.00042	-.00063	-.00102	-.00787	.00135	.00043	.00795

LA-11, CFT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RFD004) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 15.000 ELEVTR = .000
ATLORN = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7666 58.1N. XREF = 6.2902 INCHES
LREF = 3.9611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 10/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CLB	CN	CY	CL	CD	L/D
10.300	-9.088	15.04761	.26560	.06990	-.02520	.00917	.00728	.08817	.25402	.15517	1.63700
10.300	-8.000	15.04763	.26661	.06186	-.02652	.00813	.00682	.07754	.25553	.15346	1.66510
10.300	-7.096	15.06255	.26659	.06047	-.02751	.00817	.00587	.07227	.25776	.15270	1.68801
10.300	-6.058	15.07192	.26415	.07328	-.02723	.00755	.00690	.05728	.25480	.14658	1.73835
10.300	-5.029	15.07345	.26648	.07632	-.02856	.00675	.00441	.05307	.25865	.14891	1.73696
10.300	-4.009	15.06443	.29129	.07612	-.02958	.00641	.00313	.05126	.26144	.14931	1.75104
10.300	-3.015	15.06812	.29206	.07407	-.03046	.00555	.00205	.04429	.26248	.14841	1.76854
10.300	-2.036	15.09276	.28962	.07213	-.03239	.00506	.00130	.03425	.26025	.14506	1.79823
10.300	-1.042	15.09470	.28320	.07320	-.03290	.00382	-.00020	.02642	.26383	.14698	1.79503
10.300	.014	15.09634	.28455	.07399	-.03243	.00240	-.00179	.01961	.26537	.14718	1.80299
10.300	.947	15.09423	.29510	.07315	-.03287	.00166	-.00319	.01216	.26587	.14748	1.80278
10.300	GRADIENT	.00215	.00066	-.00056	.00002	-.00097	-.00127	-.00791	.00097	-.00031	.01021

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TABULATED SOURCE DATA - CFT96 (LA-11)

LA-11, CFT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

(RP0005) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 20.000 ELEVTR = .000
 ATURON = .000 BCFAP = -14.250

REFERENCE DATA

SREF = 21.7866 98. IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0231 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 9/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	ALPHA	ON	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-9.117	20.10615	.47031	.07973	-.13239	.01305	.01032	.11936	.41423	.23655	1.75110
10.300	-8.061	20.10015	.47366	.07817	-.03389	.01201	.00983	.11014	.41972	.23716	1.76978
10.300	-7.071	20.09739	.47884	.07768	-.03515	.01032	.00896	.10104	.42299	.23749	1.78109
10.300	-6.043	20.10168	.48268	.07794	-.03636	.00905	.00703	.09533	.42649	.23909	1.78384
10.300	-5.078	20.09903	.48567	.07834	-.03723	.00815	.00518	.09247	.42917	.24046	1.78478
10.300	-4.015	20.09647	.48717	.07828	-.03800	.00680	.00368	.08632	.43060	.24092	1.78732
10.300	-3.019	20.09594	.48936	.07813	-.03880	.00558	.00234	.08011	.43279	.24145	1.79244
10.300	-2.041	20.09161	.48995	.07771	-.03966	.00472	.00094	.07623	.43344	.24129	1.79638
10.300	-1.033	20.08996	.48956	.07771	-.03877	.00357	-.00069	.07135	.43310	.24111	1.79626
10.300	-.018	20.08966	.48969	.07778	-.03852	.00265	-.00241	.06372	.43318	.24125	1.79559
10.300	.992	20.09011	.49105	.07731	-.03845	.00170	-.00406	.05664	.43431	.24128	1.80131
10.300	GRADIENT	-.00103	.00037	-.00017	-.00004	-.00101	-.00156	-.00581	.00059	.00003	.00226

LA-11, CFT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

(RP0006) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = .000
 ATURON = .000 BCFAP = -14.250

REFERENCE DATA

SREF = 21.7866 98. IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0231 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 8/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	ALPHA	ON	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-9.089	25.27310	.69107	.08644	-.04765	.01575	.01053	.17817	.58801	.37323	1.57548
10.300	-8.082	25.26306	.68231	.08436	-.04805	.01438	.00976	.16440	.59009	.37175	1.58734
10.300	-7.088	25.24282	.69422	.08311	-.04859	.01288	.00875	.15476	.59248	.37123	1.59601
10.300	-6.043	25.23001	.69664	.08192	-.04904	.01137	.00730	.14658	.59526	.37105	1.60427
10.300	-5.081	25.21927	.69723	.08097	-.04979	.01011	.00569	.14067	.59827	.37033	1.61011
10.300	-4.029	25.21355	.70022	.08091	-.05042	.00875	.00387	.13486	.59904	.37149	1.61233
10.300	-3.064	25.20320	.70360	.08212	-.05187	.00724	.00199	.13432	.60165	.37392	1.60905
10.300	-2.042	25.20365	.70596	.08223	-.05207	.00590	.00028	.13192	.60373	.37502	1.60986
10.300	-1.042	25.20180	.70821	.08200	-.05214	.00474	-.00159	.12797	.60317	.37448	1.61089
10.300	-.028	25.19694	.70924	.08167	-.05224	.00363	-.00338	.12171	.60337	.37414	1.61266
10.300	.948	25.19944	.70486	.08212	-.05204	.00244	-.00501	.11506	.60282	.37442	1.61001
10.300	GRADIENT	-.00080	.00078	.00013	-.00026	-.00124	-.00178	-.00402	.00067	.00042	-.00002

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TABULATED SOURCE DATA - CPHT96 (LA-11)

(RPD007) (15 AUG 73)

LA-11, CPHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7806 90 IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0231 INCHES ZREF = .0000 INCHES
 SCALE = .0075

ALPHA = 30.000 ELEVTR = .000
 AIRLON = .000 BOFLAP = -14.250

RUN NO. 7/0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACN	BETA	ALPHA	ON	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-6.784	30.34616	.92897	.08785	-.06440	.02302	.01334	.15529	.75716	.54536	1.36836
10.300	-7.941	30.33669	.93392	.08744	-.06504	.02392	.01147	.15489	.76188	.54718	1.39237
10.300	-6.919	30.31433	.93507	.08568	-.06423	.02528	.00990	.08997	.76397	.54593	1.39939
10.300	-5.949	30.28797	.93639	.08461	-.06436	.02408	.00832	.08180	.76591	.54532	1.40430
10.300	-4.945	30.26840	.93872	.08414	-.06462	.02338	.00644	.08224	.76836	.54584	1.40766
10.300	-3.932	30.24545	.94106	.08403	-.06597	.02165	.00474	.08611	.77064	.54661	1.40986
10.300	-2.965	30.23614	.94396	.08363	-.06640	.01997	.00301	.07894	.77332	.54780	1.41167
10.300	-2.002	30.22837	.94582	.08325	-.06685	.01852	.00136	.07036	.77530	.54810	1.41452
10.300	-1.032	30.21808	.94511	.08230	-.06727	.01658	-.00033	.06360	.77527	.54678	1.41787
10.300	-.004	30.21909	.94637	.08229	-.06767	.01523	-.00220	.05626	.77634	.54743	1.41814
10.300	1.012	30.22007	.94870	.08361	-.06825	.01367	-.00393	.04975	.77768	.54975	1.41461
10.300	GRADIENT	-.00780	.00150	-.00024	-.00055	-.00164	-.00175	-.00731	.00149	.00045	.00157

(RPD008) (15 AUG 73)

LA-11, CPHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7806 90 IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0231 INCHES ZREF = .0000 INCHES
 SCALE = .0075

ALPHA = 35.000 ELEVTR = .000
 AIRLON = .000 BOFLAP = -14.250

RUN NO. 8/0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACN	BETA	ALPHA	ON	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-6.784	35.47251	1.17369	.09306	-.09174	.01585	.01300	.13637	.90375	.75457	1.19771
10.300	-7.799	35.44237	1.17991	.08978	-.09180	.01464	.01134	.13589	.90921	.75735	1.20031
10.300	-6.809	35.40081	1.18486	.08665	-.09224	.01204	.00977	.11843	.91434	.75860	1.20498
10.300	-5.863	35.37139	1.18946	.08689	-.09232	.01106	.00814	.11557	.91845	.76103	1.20686
10.300	-4.880	35.33921	1.19274	.08692	-.09302	.00830	.00641	.10456	.92148	.76252	1.20846
10.300	-3.883	35.31869	1.19594	.08672	-.09308	.00633	.00453	.09506	.92290	.76264	1.21013
10.300	-2.931	35.30781	1.19828	.08635	-.09330	.00562	.00291	.08654	.92436	.76293	1.21159
10.300	-1.994	35.29810	1.19926	.08761	-.09369	.00422	.00135	.08335	.92573	.76276	1.21366
10.300	-1.005	35.28879	1.19752	.08731	-.09365	.00279	-.00055	.07718	.92704	.76307	1.21488
10.300	-.040	35.27305	1.19740	.08602	-.09449	.00134	-.00226	.07212	.92674	.76333	1.21409
10.300	.967	35.25064	1.19953	.08760	-.09478	-.00020	-.00406	.06570	.92849	.76450	1.21449
10.300	GRADIENT	-.00941	.00109	-.00025	-.00031	-.00141	-.00178	-.00640	.00115	.00028	.00108

TABULATED SOURCE DATA - CPHT96 (LA-11)

LA-11, CPHT 96, ROCKWELL CRB. 0898 W/MOD. NOSE

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RPD009 (15 AUG 73)

PARAMETRIC DATA

BETA = .000 ELEVTR = -10.000
AIRLON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7606 98.1IN. XREF = 6.2902 INCHES
LREF = 3.5611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 12/ 0 RWL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAOH	ALPHA	BETA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	9.966	.00659	.13796	.06779	-.02080	.00056	-.00110	-.00096	.12412	.09067	1.36884
10.300	15.032	.00796	.27016	.06351	-.21795	.00025	-.00110	-.00196	.24392	.13333	1.82944
10.300	19.966	.00793	.42921	.07033	-.01774	-.00005	-.00123	-.00178	.37940	.21266	1.78408
10.300	25.165	.00845	.62155	.07366	-.02229	-.00046	-.00126	-.00236	.53113	.33114	1.60394
10.300	30.129	.00745	.82145	.07222	-.02937	-.00133	-.00126	-.00271	.67421	.47479	1.42003
10.300	35.313	.00489	1.06385	.07316	-.04479	-.00219	-.00104	-.00422	.82467	.67627	1.21943
GRADIENT		-.00005	.03657	.00034	-.00090	-.00011	-.00000	-.00011	.02792	.02300	-.01224

RPD010 (15 AUG 73)

LA-11, CPHT 96, ROCKWELL CRB. 0898 W/MOD. NOSE

PARAMETRIC DATA

BETA = -5.000 ELEVTR = -10.000
AIRLON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7606 98.1IN. XREF = 6.2902 INCHES
LREF = 3.5611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 13/ 0 RWL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAOH	ALPHA	BETA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	9.977	-4.82136	.14104	.06877	-.01664	.00492	.00378	.03375	.12699	.09217	1.37784
10.300	15.136	-4.90107	.28805	.07056	-.01761	.00463	.00471	.03594	.25963	.14333	1.81146
10.300	19.965	-4.99965	.44564	.07153	-.01709	.00499	.00656	.03262	.39436	.21954	1.79630
10.300	25.082	-4.97734	.63364	.07328	-.02034	.00591	.00692	.03084	.54283	.33498	1.62047
10.300	30.226	-4.91487	.84689	.07543	-.02940	.00620	.00705	.03051	.69386	.49156	1.41157
10.300	35.343	-4.81472	1.07916	.07620	-.04478	.00570	.00690	.03204	.83572	.68702	1.21645
GRADIENT		.00429	.03687	.00030	-.00100	.00005	.00013	-.00021	.02816	.02334	-.01238

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TABULATED SOURCE DATA - CFHT96 (LA-11)

LA-11, CFHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

(RPD011) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 10.000 ELEVTR = -10.000
AILRON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7866 96. IN. XREF = 6.2902 INCHES
LREF = 3.5611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 21/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-8.956	9.92675	.12844	.07548	-.01495	.00960	.00445	.09149	.11350	.09649	1.17626
10.300	-7.890	9.94608	.13072	.07257	-.01625	.00771	.00465	.06838	.11553	.09394	1.22984
10.300	-6.951	9.96932	.13119	.07083	-.01783	.00654	.00461	.05782	.11694	.09248	1.26459
10.300	-5.934	9.98292	.13248	.06999	-.01860	.00553	.00421	.04736	.11834	.09190	1.28772
10.300	-4.936	9.99371	.13269	.06819	-.01915	.00443	.00395	.03744	.11884	.09018	1.31778
10.300	-3.956	10.00008	.13463	.06662	-.01809	.00451	.00272	.02948	.12068	.09199	1.31182
10.300	-3.006	10.02291	.13651	.06918	-.01886	.00354	.00194	.02164	.12239	.09189	1.33194
10.300	-1.971	10.03478	.13758	.06740	-.01955	.00238	.00127	.01311	.12353	.09131	1.36787
10.300	-.991	10.02930	.14054	.06913	-.01997	.00137	.00021	.00599	.12635	.09255	1.36518
10.300	-.003	10.03607	.14368	.07017	-.02079	.00082	-.00118	-.00144	.12945	.09417	1.37463
10.300	1.021	10.02973	.14240	.07149	-.02059	-.00120	-.00226	-.00351	.12795	.09422	1.35799
GRADIENT		.00611	.00184	.00129	-.00040	-.00086	-.00102	-.00785	.00175	.00509	.01004

LA-11, CFHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

(RPD012) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 15.000 ELEVTR = -10.000
AILRON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7866 96. IN. XREF = 6.2902 INCHES
LREF = 3.5611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 20/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-9.035	15.03633	.27710	.07863	-.01487	.00923	.00717	.08067	.24716	.14802	1.66972
10.300	-8.031	15.04625	.27659	.07638	-.01614	.00804	.00637	.06835	.24728	.14556	1.69881
10.300	-7.042	15.05426	.27851	.07376	-.01747	.00688	.00591	.05805	.24928	.14550	1.71331
10.300	-6.003	15.05896	.27856	.07026	-.01722	.00569	.00703	.04244	.24650	.13908	1.77237
10.300	-5.011	15.07205	.27856	.07180	-.01788	.00489	.00457	.03815	.25031	.14177	1.76562
10.300	-4.006	15.07164	.28120	.07112	-.01907	.00390	.00356	.02978	.25304	.14180	1.78449
10.300	-3.001	15.07102	.28238	.06972	-.01969	.00297	.00261	.02067	.25454	.14074	1.80856
10.300	-1.995	15.06391	.27786	.06805	-.01881	.00225	.00220	.01122	.25112	.13608	1.84534
10.300	-1.012	15.06366	.28328	.06794	-.01856	.00126	.00040	.00341	.25584	.13932	1.83642
10.300	.000	15.07483	.28450	.06835	-.01864	.00031	-.00107	-.00137	.25693	.13999	1.83534
10.300	1.027	15.06803	.28506	.06859	-.01894	-.00059	-.00252	-.00345	.25736	.14042	1.83288
GRADIENT		.00266	.00046	-.00042	.00011	-.00089	-.00123	-.00748	.00095	-.00017	.00890



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TABULATED SOURCE DATA - CPNT96 (LA-11)

LA-11, CPNT 96, ROCKWELL ORB. 0698 W/NO. NOSE

(RPD013) (15 AUG 73)

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REFERENCE DATA

SREF = 21.7666 90. IN. YARP = 6.2902 INCHES
LREF = 3.5611 INCHES YARP = .0070 INCHES
BREF = 7.0231 INCHES ZARP = .0000 INCHES
SCALE = .0075

RUN NO. 19/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WAOH	BETA	ALPHA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-9.092	20.13025	.43822	.07567	-.01365	.01113	.01100	.06771	.38534	.22205	1.73540
10.300	-8.086	20.12614	.44152	.07441	-.01541	.00941	.01051	.05723	.38695	.22180	1.73363
10.300	-7.079	20.12581	.44528	.07328	-.01655	.00774	.00971	.04839	.39290	.22196	1.76996
10.300	-6.022	20.11838	.44896	.07304	-.01707	.00636	.00817	.04091	.39644	.22300	1.77774
10.300	-5.055	20.11756	.45293	.07343	-.01737	.00526	.00640	.03507	.39816	.22404	1.77717
10.300	-4.044	20.11547	.45487	.07368	-.01817	.00417	.00480	.02806	.40172	.22581	1.77902
10.300	-3.092	20.11439	.45607	.07325	-.01867	.00293	.00337	.01987	.40306	.22562	1.78646
10.300	-2.019	20.11518	.45697	.07341	-.01887	.00187	.00206	.01268	.40385	.22609	1.78625
10.300	-1.995	20.12697	.45777	.07314	-.01839	.00183	.00202	.00539	.40464	.22619	1.78892
10.300	-.014	20.12187	.45803	.07325	-.01842	-.00203	-.00118	-.00132	.40487	.22635	1.78870
10.300	1.015	20.12114	.45903	.07319	-.01835	-.00105	-.00276	-.02819	.40563	.22663	1.79271
10.300	GRADIENT	.00177	.00078	-.00011	.00001	-.00102	-.00150	-.00714	.00276	.00318	.00193

REFERENCE DATA

SREF = 21.7666 90. IN. YARP = 6.2902 INCHES
LREF = 3.5611 INCHES YARP = .0070 INCHES
BREF = 7.0231 INCHES ZARP = .0000 INCHES
SCALE = .0075

RUN NO. 18/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WAOH	BETA	ALPHA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-9.090	25.20012	.63680	.07984	-.01875	.01213	.01211	.06830	.54215	.34346	1.57851
10.300	-7.982	25.18487	.63680	.07766	-.01931	.01040	.01116	.05796	.54485	.34203	1.59298
10.300	-7.016	25.17409	.63941	.07699	-.01995	.00895	.00991	.04868	.54593	.34166	1.59787
10.300	-6.002	25.16057	.64061	.07544	-.02020	.00756	.00856	.04104	.54776	.34064	1.60804
10.300	-5.003	25.14881	.64086	.07508	-.02034	.00625	.00708	.03231	.54821	.34029	1.61100
10.300	-4.002	25.13703	.64204	.07463	-.02064	.00488	.00558	.02469	.54953	.34096	1.61487
10.300	-3.021	25.13095	.64355	.07473	-.02114	.00356	.00401	.01793	.55090	.34096	1.61571
10.300	-1.990	25.12618	.64823	.07621	-.02260	.00116	.00221	.01247	.55453	.34425	1.61084
10.300	-1.022	25.11888	.64880	.07664	-.02257	.00068	.00055	.00560	.55491	.34481	1.60932
10.300	-.042	25.12316	.64826	.07682	-.02253	-.00032	-.00109	-.00127	.55485	.34503	1.60946
10.300	1.012	25.12735	.64633	.07613	-.02250	-.00156	-.00287	-.00841	.55485	.34499	1.60833
10.300	GRADIENT	-.00225	.00148	.00047	-.00037	-.00129	-.00169	-.00657	.00115	.00104	-.00132

(RPD014) (15 AUG 73)

LA-11, CPNT 96, ROCKWELL ORB. 0698 W/NO. NOSE

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = -10.000
ALTEON = .000 BOFLAP = -14.250

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = -10.000
ALTEON = .000 BOFLAP = -14.250

DATE 10 SEP 73 TABULATED SOURCE DATA - CFM796 (LA-11)

LA-11, CFM7 35, ROCKWELL CRB. D888 W/MOD. NOSE

(RP0015) (15 AUG 73)

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7866 IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

ALPHA = 30.000 ELEVTR = -10.000
 ATLRON = .000 BOFLAP = -14.250

RUN NO. 17/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	ALPHA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-6.920	30.35972	.61784	.07970	-.02827	.01220	.51556	.06620	.69647	.50032	1.39203
10.300	-7.979	30.32050	.66031	.07943	-.02967	.01039	.51184	.05893	.70253	.50286	1.39701
10.300	-6.959	30.29750	.67225	.07475	-.02914	.00970	.51019	.05071	.70473	.50302	1.40100
10.300	-5.932	30.27221	.68008	.07112	-.02833	.00819	.50867	.04146	.70379	.50036	1.40656
10.300	-4.972	30.26731	.68053	.07571	-.02811	.00666	.50742	.03296	.70456	.49999	1.40913
10.300	-3.984	30.25249	.68345	.07711	-.02863	.00520	.50581	.02556	.70705	.50164	1.40947
10.300	-2.974	30.24219	.68528	.07610	-.02930	.00352	.50406	.01841	.70919	.50155	1.41400
10.300	-1.961	30.22409	.68441	.07564	-.02991	.00267	.50227	.01166	.71241	.50257	1.41753
10.300	-.961	30.22375	.68774	.07440	-.03004	.00202	.50056	.00471	.71234	.50109	1.42156
10.300	.007	30.22222	.68919	.07503	-.03047	.00131	.50019	-.00209	.71328	.50234	1.41901
10.300	1.007	30.22375	.67032	.07564	-.03115	-.00247	.50027	-.07933	.71393	.50346	1.41806
10.300	GRADIENT	-.00752	.50155	-.00733	-.00049	-.00161	-.00170	-.00702	.00157	.00041	.00198

(RP0016) (15 AUG 73)

LA-11, CFM7 35, ROCKWELL CRB. D888 W/MOD. NOSE

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7866 IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

ALPHA = 35.000 ELEVTR = -10.000
 ATLRON = .000 BOFLAP = -14.250

RUN NO. 15/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	ALPHA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-6.733	35.54967	1.07956	.07865	-.04497	.01233	.01378	.06497	.83261	.69166	1.20379
10.300	-7.746	35.50816	1.09662	.07781	-.04516	.01088	.01210	.05649	.83951	.69460	1.20862
10.300	-6.801	35.47950	1.09175	.07779	-.04492	.00960	.01059	.04899	.84389	.69698	1.21077
10.300	-5.828	35.44364	1.08669	.07748	-.04548	.00757	.00867	.04122	.85016	.70226	1.21406
10.300	-4.864	35.41997	1.10016	.07744	-.04523	.00606	.00722	.03411	.85173	.70068	1.21558
10.300	-3.875	35.40219	1.10178	.07727	-.04498	.00451	.00542	.02622	.85331	.70126	1.21682
10.300	-2.808	35.37567	1.10229	.07715	-.04509	.00266	.00375	.01904	.85411	.70107	1.21831
10.300	-1.845	35.37192	1.10521	.07691	-.04526	.00117	.00237	.01144	.85668	.70250	1.21949
10.300	-.903	35.36837	1.10570	.07645	-.04563	-.00051	.00074	.00362	.85747	.70324	1.22101
10.300	-.054	35.35936	1.10723	.07682	-.04629	-.00209	-.00046	-.00334	.85863	.70360	1.22098
10.300	.964	35.35960	1.10755	.07683	-.04651	-.00364	-.00253	-.01094	.85978	.70360	1.22055
10.300	GRADIENT	-.00868	.00134	-.00704	-.00066	-.00166	-.00165	-.00777	.00130	.00051	.00096



DATE 10 SEP 73
TABULATED SOURCE DATA - CHT96 (LA-11)
LA-11, CHT 96, ROCKWELL COR. 0888 W/MOD. NOSE
(RPT0017) (15 AUG 73)

PARAMETRIC DATA

BETA = .000 ELEVTR = -20.000
ATLON = .000 BOFLAP = -14.250

REFERENCE DATA

WCH = 21.7000 IN. WRP = 6.2902 INCHES
LWT = 3.9811 INCHES WRP = .0000 INCHES
BWT = 7.0231 INCHES WRP = .0000 INCHES
SCALE = .0075

RUN NO. 32/0 BWL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WCH	ALPHA	BETA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	10.000	-.00337	.13661	.06949	-.01899	.00051	-.00127	-.00125	.12441	.09255	1.34425
10.300	15.012	-.00298	.27705	.06820	-.01444	.00025	-.00115	-.00250	.24993	.13763	1.81670
10.300	20.114	-.00240	.44324	.07156	-.01062	-.00080	-.00130	-.00240	.39180	.21962	1.78307
10.300	25.199	-.00227	.63927	.07686	-.01240	-.00055	-.00132	-.00327	.54571	.34173	1.59688
10.300	30.209	-.00371	.84617	.07377	-.01604	-.00140	-.00139	-.00430	.69313	.49123	1.41101
10.300	35.263	-.00637	1.08039	.07610	-.02069	-.00245	-.00115	-.02378	.83705	.66732	1.21751
GRADIENT		-.00010	.03758	.00040	-.00027	-.00011	-.00020	-.00116	.02653	.02350	-.01152

(RPT0018) (15 AUG 73)

LA-11, CHT 96, ROCKWELL COR. 0888 W/MOD. NOSE

PARAMETRIC DATA

BETA = -5.000 ELEVTR = -20.000
ATLON = .000 BOFLAP = -14.250

REFERENCE DATA

WCH = 21.7000 IN. WRP = 6.2902 INCHES
LWT = 3.9811 INCHES WRP = .0000 INCHES
BWT = 7.0231 INCHES WRP = .0000 INCHES
SCALE = .0075

RUN NO. 33/0 BWL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WCH	ALPHA	BETA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	9.881	-4.82127	.14313	.07194	-.01463	.00477	.00405	.03633	.12650	.09546	1.34322
10.300	15.030	-4.97080	.29929	.07226	-.01339	.00456	.00490	.03640	.28056	.14490	1.75846
10.300	20.037	-4.98706	.45586	.07367	-.00996	.00462	.00674	.03249	.40290	.22574	1.78477
10.300	25.843	-4.97496	.65006	.07616	-.00975	.00559	.00701	.03072	.55538	.34633	1.60362
10.300	30.194	-4.91514	.85470	.07732	-.01352	.00577	.00869	.03053	.69973	.49685	1.40837
10.300	35.328	-4.61480	1.08077	.07916	-.02003	.00534	.00674	.03209	.84471	.68432	1.21825
GRADIENT		.00420	.03737	.00028	-.00032	.00004	.00011	.00123	.02848	.02351	-.01121

TABULATED SOURCE DATA - CPMT96 (LA-11)

LA-11, CPMT 96, ROCKWELL CRB, 0888 W/MOD, NOSE

DATE 10 SEP 73

(RP0019) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 10.000 ELEVTR = -20.000
AIIURN = .000 BOFLAP = -14.250

REFERENCE DATA

BET = 21.7766 28.1N. 149P = 6.2902 INCHES
LW = 3.5611 INCHES 149P = .0000 INCHES
BET = 7.0251 149-23 249P = .0000 INCHES
SCALE = .0075

RUN NO. 36/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

W/O	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/O
10.300	-8.923	9.91369	.12761	.07426	-.01280	.00882	.00450	.06168	.11292	.09512	1.18716
10.300	-7.973	9.92485	.12633	.07235	-.01360	.00746	.00466	.06900	.11197	.09304	1.20343
10.300	-6.922	9.93072	.13101	.07176	-.01610	.00635	.00462	.05772	.11163	.09332	1.24981
10.300	-5.953	9.93612	.13066	.07032	-.01608	.00523	.00428	.04771	.11660	.09156	1.27390
10.300	-4.986	9.94036	.13256	.06960	-.01633	.00434	.00406	.03793	.11849	.09151	1.29478
10.300	-3.989	9.94499	.13475	.06874	-.01719	.00340	.00337	.02870	.12093	.09010	1.32226
10.300	-2.996	9.94931	.13479	.06763	-.01675	.00289	.00303	.02112	.12085	.09090	1.32947
10.300	-1.997	10.01658	.13937	.06748	-.01770	.00214	.00142	.01318	.12570	.09073	1.36547
10.300	-0.995	10.01966	.13932	.06780	-.01790	.00126	.00031	.00567	.12561	.09103	1.37979
10.300	-0.001	10.01154	.14236	.07036	-.01669	.00061	-.00796	-.00151	.12798	.09406	1.36063
10.300	.993	10.00807	.13687	.07010	-.01890	-.00016	-.00214	-.00964	.12457	.09317	1.33701
10.300	GRADIENT	.00337	.00140	.00022	-.00036	-.00076	-.00105	-.00786	.00133	.00147	.00769

REFERENCE DATA

BET = 21.7966 28.1N. 149P = 6.2902 INCHES
LW = 3.5611 INCHES 149P = .0000 INCHES
BET = 7.0251 INCHES 249P = .0000 INCHES
SCALE = .0075

RUN NO. 36/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

W/O	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/O
10.300	-9.029	14.93943	.27191	.07647	-.01073	.00894	.00717	.08014	.24249	.14992	1.66185
10.300	-7.996	14.94051	.27463	.07780	-.01211	.00767	.00653	.06829	.24553	.14583	1.68363
10.300	-6.960	14.94639	.27364	.07479	-.01337	.00656	.00590	.03769	.24528	.14290	1.71654
10.300	-5.941	14.95676	.27008	.07093	-.01312	.00545	.00703	.04248	.24262	.13683	1.75522
10.300	-4.961	14.96636	.27332	.07365	-.01339	.00470	.00472	.03660	.24715	.14231	1.77573
10.300	-3.972	14.96832	.27416	.07147	-.01303	.00368	.00352	.02841	.24670	.13994	1.76290
10.300	-2.989	14.97648	.27996	.07040	-.01359	.00266	.00299	.02059	.24938	.13958	1.76656
10.300	-1.999	14.97829	.27397	.06813	-.01472	.00217	.00232	.01065	.24757	.13470	1.83797
10.300	-0.999	14.98000	.27634	.06818	-.01411	.00116	.00047	.00490	.24932	.13730	1.81595
10.300	-0.001	14.98126	.27527	.06836	-.01445	.00031	-.00099	-.00205	.25114	.13799	1.81996
10.300	1.000	14.97777	.27966	.06873	-.01453	-.00032	-.00241	-.00931	.25259	.13673	1.82031
10.300	GRADIENT	.00227	.00072	-.00063	-.00004	-.00066	-.00117	-.00772	.00790	-.00060	.01415

PARAMETRIC DATA

ALPHA = 15.000 ELEVTR = -20.000
AIIURN = .000 BOFLAP = -14.250

LA-11, CPMT 96, ROCKWELL CRB, 0888 W/MOD, NOSE

(RP0020) (15 AUG 73)

DATE 10 SEP 75

TABULATED SOURCE DATA - CFHT96 (LA-11)

LA-11, CFHT 96, ROCKWELL CRB. 0698 W/MOD. NOSE

(RPD021) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 20.000 ELEVTR = -20.000
 AIRLON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7896 96. IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 37/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-9.048	20.10920	.43409	.07653	-.00886	.01068	.01110	.06741	.38131	.22111	1.72451
10.300	-6.019	20.09697	.43694	.07514	-.00870	.00897	.01087	.05323	.38451	.22071	1.74211
10.300	-7.097	20.09634	.44233	.07436	-.00962	.00748	.01003	.04674	.38984	.22184	1.75732
10.300	-6.057	20.09571	.44167	.07370	-.00988	.00613	.00841	.04010	.38946	.22097	1.76246
10.300	-5.025	20.09625	.44520	.07302	-.01036	.00503	.00653	.03413	.39300	.22155	1.77389
10.300	-4.026	20.09708	.45093	.07384	-.01149	.00396	.00486	.02686	.39810	.22429	1.77492
10.300	-3.011	20.09579	.45241	.07410	-.01197	.00287	.00350	.01872	.39941	.22532	1.77501
10.300	-2.028	20.09622	.45285	.07302	-.01163	.00194	.00214	.01196	.40019	.22417	1.78522
10.300	-1.030	20.09532	.45459	.07278	-.01158	.00064	.00067	.00446	.40191	.22454	1.78992
10.300	.014	20.09166	.45157	.07213	-.01058	-.00008	-.00113	-.00289	.39931	.22287	1.79169
10.300	1.008	20.09711	.45592	.07209	-.01047	-.00118	-.00270	-.00373	.40339	.22436	1.79793
GRADIENT			.00068	-.00042	.00227	-.00101	-.00151	-.00710	.00079	-.00016	.00481

LA-11, CFHT 96, ROCKWELL CRB. 0698 W/MOD. NOSE

(RPD022) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = -20.000
 AIRLON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7896 96. IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 36/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	-9.030	25.25763	.63531	.08111	-.00946	.01104	.01180	.07147	.53996	.34444	1.56765
10.300	-8.030	25.24574	.63498	.07862	-.00882	.00717	.01113	.05821	.54071	.34188	1.58156
10.300	-7.020	25.22596	.63640	.07774	-.00921	.00860	.01008	.04874	.54256	.34159	1.58833
10.300	-5.959	25.21894	.63765	.07689	-.00946	.00711	.00852	.03984	.54412	.34125	1.59448
10.300	-5.007	25.20408	.63538	.07522	-.00947	.00584	.00713	.03271	.54286	.33863	1.60308
10.300	-4.024	25.20069	.63784	.07485	-.00994	.00459	.00568	.02453	.54526	.33932	1.60695
10.300	-2.990	25.18478	.64089	.07495	-.01042	.00331	.00402	.01722	.54807	.34055	1.60940
10.300	-1.995	25.17946	.64083	.07589	-.01147	.00173	.00218	.01181	.54765	.34133	1.60448
10.300	-1.026	25.17867	.64346	.07642	-.01205	.00048	.00051	.00497	.54980	.34292	1.60332
10.300	-.015	25.17638	.64373	.07711	-.01199	-.00055	-.00121	-.00190	.54977	.34363	1.59989
10.300	1.000	25.17828	.64210	.07644	-.01204	-.00173	-.00290	-.00878	.54857	.34235	1.60236
GRADIENT			.00093	.00043	-.00045	-.00127	-.00172	-.00659	.00068	.00074	-.00150

DATE 10 SEP 73

TABULATED SOURCE DATA - CPH196 (LA-11)

(RFD023) (15 AUG 73)

LA-11, CPHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

REFERENCE DATA

REF = 21.7866 58-IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0073

PARAMETRIC DATA

ALPHA = 30.000 ELEVTR = -20.000
 AILRON = .000 BOFLAP = -14.250

RUN NO. 35/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CLB	CYN	CY	CL	CD	L/D
10.300	-6.805	30.32170	.84451	.07969	-.01374	.01172	.01340	.06585	.68876	.49514	1.39106
10.300	-7.931	30.29214	.84504	.07930	-.01375	.01046	.01169	.05762	.68966	.49472	1.39404
10.300	-6.902	30.27076	.84968	.07876	-.01364	.00915	.00993	.04876	.69413	.49634	1.39851
10.300	-5.931	30.24117	.85041	.07824	-.01357	.00752	.00849	.04046	.69528	.49590	1.40207
10.300	-4.945	30.25039	.85047	.07699	-.01313	.00605	.00702	.03267	.69605	.49471	1.40698
10.300	-3.965	30.21343	.85080	.07736	-.01359	.00470	.00562	.02479	.69629	.49500	1.40667
10.300	-2.956	30.20332	.85515	.07683	-.01445	.00318	.00389	.01740	.70041	.49661	1.41039
10.300	-1.955	30.19725	.85765	.07645	-.01519	.00169	.00204	.01060	.70281	.49745	1.41283
10.300	-1.059	30.19099	.85837	.07587	-.01533	.00025	.00060	.00398	.70378	.49724	1.41538
10.300	-.015	30.18447	.85486	.07526	-.01522	-.00148	-.00131	-.00316	.70113	.49488	1.41676
10.300	1.020	30.18946	.86047	.07646	-.01589	-.00285	-.00280	-.01069	.70531	.49878	1.41408
10.300	GRADIENT	-.00691	.00149	-.00024	-.00345	-.00151	-.00168	-.00717	.00147	.00045	.00167

(RFD024) (15 AUG 73)

LA-11, CPHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

PARAMETRIC DATA

ALPHA = 35.000 ELEVTR = -20.000
 AILRON = .000 BOFLAP = -14.250

RUN NO. 34/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CLB	CYN	CY	CL	CD	L/D
10.300	-6.725	35.44936	1.07734	.07918	-.02854	.01125	.01340	.06426	.63167	.69945	1.20637
10.300	-7.756	35.40742	1.08074	.07874	-.02823	.00971	.01176	.05608	.63524	.69034	1.20990
10.300	-6.769	35.37271	1.08349	.07830	-.02792	.00813	.01010	.04841	.63804	.69124	1.21238
10.300	-5.813	35.34647	1.09019	.07798	-.02769	.00637	.00855	.04046	.64412	.69430	1.21579
10.300	-4.877	35.31159	1.08770	.07732	-.02745	.00505	.00684	.03319	.64255	.69230	1.21703
10.300	-3.869	35.29563	1.09043	.07761	-.02723	.00348	.00499	.02528	.64515	.69339	1.21886
10.300	-2.893	35.27515	1.09371	.07783	-.02714	.00191	.00337	.01720	.64795	.69516	1.21979
10.300	-1.935	35.26334	1.09302	.07640	-.02722	.00025	.00193	.00993	.64835	.69342	1.22342
10.300	-.963	35.26448	1.09665	.07762	-.02753	-.00139	.00042	.00184	.65060	.69653	1.22120
10.300	-.017	35.26189	1.09698	.07717	-.02789	-.00290	-.00118	-.00556	.65115	.69631	1.22238
10.300	.997	35.25652	1.09411	.07674	-.02816	-.00456	-.00293	-.01322	.64910	.69425	1.22305
10.300	GRADIENT	-.00672	.00129	-.00017	-.00014	-.00165	-.00164	-.00794	.00126	.00048	.00097



DATE 10 SEP 73

TABULATED SOURCE DATA - CFHT96 (LA-11)

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LA-11, CFHT 96, ROCKWELL CRB. 0898 W/MOD. NOSE

(RPD025) (15 AUG 73)

REFERENCE DATA

REF = 21.7866 98. IN. XRP = 6.2902 INCHES
LREF = 3.5611 INCHES YRP = .0000 INCHES
BREF = 7.0251 INCHES ZRP = .0000 INCHES
SCALE = .0075

BETA = .000 ELEVTR = -40.000
AILRON = .000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 62/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	10.001	-0.00194	.13136	.07229	-.01441	.00072	-.03121	-.00221	.11673	.09460	1.23367
10.300	15.002	-0.00191	.27178	.06976	-.00992	.00048	-.03120	-.00240	.24433	.13794	1.77125
10.300	20.134	-0.00106	.43364	.07380	-.00121	.00012	-.00145	-.00235	.39174	.21855	1.74668
10.300	25.224	-0.00034	.52965	.07971	-.00223	-.00023	-.00131	-.00282	.53200	.33673	1.57055
10.300	30.192	-0.00164	.62338	.07929	-.00141	-.00092	-.00149	-.00352	.67215	.48214	1.39408
10.300	35.333	-0.00291	1.05462	.08288	-.00174	-.00062	-.00130	-.00503	.81260	.67764	1.19815
GRADIENT		-.00002	.05651	.00048	.00039	-.00010	-.00101	-.00010	.02775	.02296	-.00636

LA-11, CFHT 96, ROCKWELL CRB. 0898 W/MOD. NOSE

(RPD026) (15 AUG 73)

REFERENCE DATA

REF = 21.7866 98. IN. XRP = 6.2902 INCHES
LREF = 3.5611 INCHES YRP = .0000 INCHES
BREF = 7.0251 INCHES ZRP = .0000 INCHES
SCALE = .0075

BETA = -5.000 ELEVTR = -40.000
AILRON = .000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 63/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CA	CLM	CBL	CYN	CY	CL	CD	L/D
10.300	9.971	-4.92274	.13721	.07442	-.01163	.00065	.00312	.03939	.12226	.09706	1.25960
10.300	15.009	-4.98467	.27672	.07056	-.00851	.00095	.00654	.03106	.24900	.13962	1.78089
10.300	20.110	-5.00156	.44407	.07546	-.00329	.00464	.00666	.03237	.39106	.22354	1.74936
10.300	25.106	-4.97923	.63264	.07911	.00032	.00051	.00697	.03143	.53683	.34081	1.58103
10.300	30.276	-4.91637	.84223	.08183	.00093	.00607	.00693	.03079	.69610	.49526	1.39527
10.300	35.394	-4.81760	1.06605	.08410	-.00547	.00052	.00667	.03301	.82196	.68716	1.19616
GRADIENT		.00424	.03674	.00048	.00035	.00009	.00011	-.00019	.02765	.02324	-.00944

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TABULATED SOURCE DATA - CRHT96 (LA-11)

LA-11, CRHT 96, ROCKWELL CRB. 0898 W/MOD. NOSE

(RP0027) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 10.000 ELEVTR = -40.000
 AIRLON = .000 BOFLAP = -14.250

REFERENCE DATA

WREF = 21.7866 98.1N. XREF = 6.2902 INCHES
 YREF = 3.5611 INCHES YREF = .0000 INCHES
 ZREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 68/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WREF	BETA	ALPHA	ON	CA	CLM	CLB	CYN	CY	CL	CD	L/D
10.300	-6.926	9.83719	.11903	.07748	-.0782	.00789	.00415	.00306	.10367	.09686	1.07234
10.300	-7.931	9.96976	.12032	.07539	-.00990	.00676	.00430	.07073	.10345	.09508	1.10899
10.300	-6.942	9.98164	.12332	.07556	-.01066	.00575	.00411	.03993	.10890	.09386	1.16024
10.300	-5.955	9.99553	.12453	.07309	-.01179	.00478	.00387	.04951	.10982	.09357	1.17370
10.300	-4.563	10.01491	.12569	.07170	-.01248	.00369	.00366	.04004	.11130	.09246	1.20373
10.300	-3.960	10.02497	.12940	.07057	-.01304	.00319	.00290	.03063	.11514	.09202	1.25119
10.300	-2.977	10.04776	.13222	.07032	-.01353	.00253	.00186	.02224	.11793	.09231	1.27754
10.300	-1.978	10.03621	.13176	.06911	-.01456	.00188	.00127	.01362	.11770	.09102	1.29314
10.300	-1.995	10.05426	.13425	.07023	-.01411	.00126	.00027	.03590	.11993	.09258	1.29532
10.300	-.004	10.05680	.13490	.07322	-.01429	.00088	-.00106	-.00175	.12004	.09565	1.25496
10.300	.992	10.08005	.13595	.07253	-.01432	.00031	-.00202	-.00992	.11923	.09481	1.25753
10.300	.0743	.00136	.00268	-.00031	-.00060	-.00060	-.00096	-.00632	.00126	.00052	.00674

(RP0028) (15 AUG 73)

LA-11, CRHT 96, ROCKWELL CRB. 0898 W/MOD. NOSE

PARAMETRIC DATA

ALPHA = 15.000 ELEVTR = -40.000
 AIRLON = .000 BOFLAP = -14.250

REFERENCE DATA

WREF = 21.7866 98.1N. XREF = 6.2902 INCHES
 YREF = 3.5611 INCHES YREF = .0000 INCHES
 ZREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 68/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WREF	BETA	ALPHA	ON	CA	CLM	CLB	CYN	CY	CL	CD	L/D
10.300	-9.003	14.96328	.26122	.07838	-.00917	.00861	.00750	.07913	.23212	.14317	1.62128
10.300	-8.022	14.96471	.26279	.07535	-.00679	.00734	.00747	.06613	.23441	.14066	1.66658
10.300	-7.018	14.97117	.26433	.07299	-.00897	.00608	.00776	.05241	.23650	.13879	1.70399
10.300	-6.022	14.96634	.26628	.07218	-.00883	.00496	.00669	.04330	.23855	.13859	1.72134
10.300	-5.030	14.99342	.26403	.07027	-.00939	.00405	.00638	.03267	.23689	.13619	1.73939
10.300	-4.015	15.00111	.27082	.07231	-.00950	.00372	.00346	.02976	.24268	.13990	1.73471
10.300	-3.018	15.00306	.26853	.06844	-.01046	.00261	.00334	.01927	.24166	.13562	1.78185
10.300	-2.000	15.00532	.27213	.06920	-.01074	.00185	.00182	.01263	.24493	.13730	1.78390
10.300	-1.008	15.00756	.27340	.06991	-.01011	.00115	.00036	.00548	.24597	.13832	1.77731
10.300	-.004	15.01191	.27472	.06991	-.01001	.00054	-.00104	-.00153	.24723	.13668	1.78273
10.300	.998	15.01080	.27542	.07039	-.00990	-.00018	-.00247	-.00827	.24779	.13933	1.77890
10.300	.00217	.00123	.00268	-.00013	-.00000	-.00075	-.00126	-.00754	.00123	.00021	.00616



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TABULATED SOURCE DATA - CFHT96 (LA-11)

LA-11, CFHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RPD029) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 20.000 ELEVTR = -40.000
ATLRON = .000 BOFLAP = -14.250

REFERENCE DATA

MACH = 21.7896 96. IN. 198P = 6.2902 INCHES
LREF = 3.4611 INCHES YMRP = .0000 INCHES
BREF = 7.0231 INCHES ZMRP = .0000 INCHES
SCALE = .0075

RUN NO. 67/ 0 PAVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CLB	CYN	CY	CL	CD	L/D
10.300	-9.080	20.04291	.42182	.07965	.00053	.01031	.01019	.07111	.36898	.21939	1.66180
10.300	-8.045	20.04340	.42484	.07776	-.00116	.00861	.00593	.05964	.37246	.21866	1.70342
10.300	-7.046	20.03654	.42859	.07612	-.00272	.00708	.00923	.04968	.37656	.21837	1.72441
10.300	-6.040	20.03736	.43043	.07531	-.00305	.00585	.00808	.04106	.37858	.21823	1.73472
10.300	-5.045	20.03723	.43040	.07501	-.00330	.00482	.00651	.03408	.37864	.21794	1.73736
10.300	-4.018	20.03641	.43245	.07465	-.00392	.00391	.00521	.02640	.38070	.21833	1.74392
10.300	-3.015	20.03115	.43223	.07392	-.00353	.00307	.00366	.01777	.38090	.21712	1.75430
10.300	-2.011	20.03431	.43282	.07243	-.00276	.00239	.00201	.01131	.38182	.21632	1.76505
10.300	-1.011	20.03454	.43767	.07513	-.00470	.00093	.00039	.00519	.38544	.22052	1.74789
10.300	.000	20.03396	.43624	.07362	-.00361	.00010	-.00127	-.00175	.38462	.21862	1.75934
10.300	1.007	20.03545	.43443	.07328	-.00305	-.00069	-.00300	-.00822	.38303	.21768	1.75961
GRADIENT		.00011	.00076	-.00011	.00006	-.00098	-.00161	-.00676	.00075	.00016	.00217

LA-11, CFHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RPD030) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = -40.000
ATLRON = .000 BOFLAP = -14.250

REFERENCE DATA

MACH = 21.7896 96. IN. 198P = 6.2902 INCHES
LREF = 3.4611 INCHES YMRP = .0000 INCHES
BREF = 7.0231 INCHES ZMRP = .0000 INCHES
SCALE = .0075

RUN NO. 68/ 0 PAVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CLB	CYN	CY	CL	CD	L/D
10.300	-9.033	25.24677	.61773	.06342	.00247	.01133	.01158	.07026	.52314	.33892	1.54354
10.300	-8.016	25.25616	.62113	.06117	.00200	.00971	.01092	.06018	.52728	.33827	1.55878
10.300	-7.012	25.21790	.62243	.06071	.00095	.00829	.00961	.05930	.52877	.33824	1.56331
10.300	-6.022	25.20425	.62390	.07933	.00044	.00702	.00847	.04177	.53036	.33729	1.57242
10.300	-5.015	25.19927	.62366	.07851	.00093	.00588	.00700	.03356	.53086	.33658	1.57730
10.300	-4.000	25.18778	.62546	.07821	.00021	.00492	.00556	.02532	.53272	.33697	1.58090
10.300	-3.016	25.17174	.62653	.07799	-.00020	.00338	.00390	.01853	.53386	.33707	1.58382
10.300	-2.004	25.17235	.63025	.07796	-.00108	.00202	.00210	.01258	.53724	.33863	1.58650
10.300	-1.002	25.17291	.63248	.07904	-.00149	.00083	.00043	.00558	.53879	.34056	1.58206
10.300	.008	25.17005	.63136	.07966	-.00132	-.00010	-.00140	-.00177	.53753	.34061	1.57812
10.300	1.002	25.17879	.63182	.07936	-.00189	-.00108	-.00294	-.00824	.53764	.34056	1.57928
GRADIENT		-.00140	.00135	.00034	-.00042	-.00113	-.00171	-.00672	.00169	.00097	-.00085

LA-11, CFHT 96, ROCKWELL CRB. 0698 W/MCO. NOSE

(RPDC31) (15 AUG 73)

REFERENCE DATA

SREF = 21.7866 98. IN. XREF = 6.2902 INCHES
 LREF = 3.5811 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 65/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-6.980	30.30470	.82515	.08356	.00040	.01131	.01324	.06697	.67024	.48852	1.37198
10.300	-7.915	30.29631	.83114	.08296	.00108	.01020	.01166	.05866	.67577	.49093	1.37650
10.300	-6.937	30.28222	.83254	.08227	.00092	.00891	.01005	.05038	.67763	.49082	1.38116
10.300	-5.946	30.23886	.83134	.08125	.00112	.00782	.00856	.04123	.67730	.48887	1.38545
10.300	-4.957	30.21807	.83292	.08094	.00166	.00622	.00725	.03233	.67900	.48915	1.38813
10.300	-3.980	30.20978	.83518	.08078	.00101	.00481	.00558	.02543	.68111	.49004	1.38990
10.300	-2.989	30.19615	.83709	.08037	.00056	.00337	.00390	.01839	.68308	.49049	1.39266
10.300	-1.973	30.18758	.83819	.07989	-.00033	.00207	.00217	.01137	.68434	.49053	1.39512
10.300	-1.002	30.18519	.83960	.07941	-.00035	.00070	.00045	.00451	.68580	.49082	1.39724
10.300	-.008	30.18824	.84093	.07956	-.00092	-.00191	-.00292	-.00292	.68687	.49162	1.39716
10.300	.992	30.17845	.84135	.07994	-.00076	-.00225	-.00288	-.01040	.68713	.49205	1.39647
10.300	GRADIENT	-.00613	.07142	-.00023	-.00043	-.00143	-.00172	-.00717	.00139	.00044	.00159

(RPDC32) (15 AUG 73)

LA-11, CFHT 96, ROCKWELL CRB. 0698 W/MCO. NOSE

PARAMETRIC DATA

SREF = 21.7866 98. IN. XREF = 6.2902 INCHES
 LREF = 3.5811 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 64/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-6.740	35.55789	1.06124	.08461	-.00716	.01199	.01345	.06665	.81414	.68597	1.18685
10.300	-7.750	35.51619	1.06695	.08394	-.00685	.01013	.01184	.05837	.81968	.68615	1.19114
10.300	-6.763	35.48249	1.07060	.08336	-.00608	.00669	.01039	.05050	.82339	.68931	1.19452
10.300	-5.825	35.44743	1.07274	.08339	-.00597	.00719	.00866	.04274	.82554	.69008	1.19630
10.300	-4.835	35.42530	1.07401	.08374	-.00531	.00572	.00694	.03510	.82684	.69077	1.19669
10.300	-3.878	35.41125	1.07497	.08362	-.00491	.00433	.00520	.02718	.82766	.69104	1.19771
10.300	-2.918	35.38797	1.07629	.08318	-.00476	.00282	.00335	.01930	.82927	.69111	1.19992
10.300	-1.931	35.37859	1.07681	.08316	-.00497	.00131	.00211	.01115	.82982	.69125	1.20045
10.300	-.977	35.37363	1.07890	.08310	-.00577	-.00004	.00031	.00362	.83129	.69211	1.20110
10.300	-.003	35.37018	1.07983	.08281	-.00590	-.00160	-.00123	-.00409	.82916	.69016	1.20140
10.300	.989	35.37504	1.07484	.08276	-.00582	-.00306	-.00283	-.01178	.82853	.68969	1.20131
10.300	GRADIENT	-.00944	.00022	-.00017	-.00017	-.00151	-.00166	-.00806	.00039	-.00015	.00083

ALPHA = 35.000 ELEVTR = -40.000
 AILRON = .000 BOFLAP = -14.250

PARAMETRIC DATA



DATE 10 SEP 73

TABULATED SOURCE DATA - CPHY96 (LA-11)

LA-11, CPHY 96, ROCKWELL CRB. 0688 W/MOD. NOSE

(RP0033) (15 AUG 73)

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7886 SQ. IN. XPRP = 6.2902 INCHES
LREF = 3.5611 INCHES YPRP = .0000 INCHES
BREF = 7.0251 INCHES ZPRP = .0000 INCHES
SCALE = .0075

BETA = .000 ELEVTR = 10.000
AILRON = .000 BDFLAP = -14.250

RUN NO. 78/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	9.956	-0.0335	.17619	.07941	-.04990	-.00084	-.00061	-.00233	.16176	.10902	1.48396
10.300	14.966	-0.0401	.33853	.08165	-.06508	-.00205	-.00030	-.00264	.30590	.16840	1.83829
10.300	20.126	-0.0556	.53488	.09237	-.08395	-.00296	-.00006	-.00296	.47023	.27134	1.73303
10.300	25.076	-0.0779	.74759	.10255	-.10396	-.00373	.00022	-.00366	.63348	.40964	1.54643
10.300	30.125	-0.1171	.98069	.10929	-.12801	-.00515	.00063	-.00428	.79338	.58673	1.35220
10.300	35.252	-0.1522	1.23836	.11782	-.15617	-.00612	.00072	-.00589	.94327	.81096	1.16315
GRADIENT		-.00049	.04207	.00161	-.00419	-.00020	.00005	-.00013	.03129	.02776	-.01637

(RP0034) (15 AUG 73)

LA-11, CPHY 96, ROCKWELL CRB. 0688 W/MOD. NOSE

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7886 SQ. IN. XPRP = 6.2902 INCHES
LREF = 3.5611 INCHES YPRP = .0000 INCHES
BREF = 7.0251 INCHES ZPRP = .0000 INCHES
SCALE = .0075

BETA = -5.000 ELEVTR = 10.000
AILRON = .000 BDFLAP = -14.250

RUN NO. 79/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	CN	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	9.969	-4.91849	.16429	.07561	-.04582	.00375	.00403	.03655	.14869	.10296	1.44405
10.300	14.999	-4.97637	.32811	.08380	-.06179	.00317	.00531	.03586	.29524	.13586	1.76007
10.300	20.104	-4.99819	.52180	.09182	-.07971	.00248	.00725	.03290	.45845	.26558	1.72621
10.300	25.136	-4.97991	.73584	.09996	-.10768	.00217	.00870	.02938	.62369	.40306	1.54741
10.300	30.255	-4.96159	.97690	.10979	-.12376	.00199	.00917	.02877	.78872	.58677	1.34419
10.300	35.351	-4.82423	1.23793	.11900	-.15374	.00173	.00926	.00016	.94083	.81331	1.15679
GRADIENT		.00370	.04241	.00171	-.00422	-.00008	.00022	-.00032	.03158	.02791	-.01651

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TABULATED SOURCE DATA - CPHT96 (LA-11)

LA-11, CPHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RPD035) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 35.000 ELEVTR = 10.000
ATLRON = .000 BDFLAP = -14.250

REFERENCE DATA

REF = 21.7006 96.1N. 100P = 6.2902 INCHES
LREF = 3.5811 INCHES 100P = .0000 INCHES
BREF = 7.0251 INCHES 200P = .0000 INCHES
SCALE = .0075

RUN NO. 85/ 0 RWL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

W/CH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-6.757	35.39363	1.22764	.11974	-.14940	.00828	.01587	.06518	.93140	.80865	1.15180
10.300	-7.766	35.35120	1.23360	.11953	-.15049	.00857	.01427	.05658	.93699	.81124	1.15502
10.300	-6.801	35.32358	1.23963	.11916	-.15124	.00490	.01267	.04892	.94266	.81408	1.15797
10.300	-5.840	35.29428	1.24367	.11893	-.15177	.00384	.01100	.04071	.94636	.81563	1.16028
10.300	-4.870	35.26595	1.24799	.11825	-.15282	.00181	.00944	.03293	.95011	.81792	1.16182
10.300	-3.992	35.24425	1.24832	.11858	-.15334	.00119	.00780	.02490	.95108	.81720	1.16382
10.300	-2.986	35.23121	1.24807	.11933	-.15301	-.00149	.00633	.01715	.95120	.81664	1.16477
10.300	-1.949	35.21552	1.24979	.11710	-.15370	-.00303	.00474	.00929	.95435	.81694	1.16820
10.300	-.383	35.20036	1.24969	.11696	-.15336	-.00455	.00276	.00249	.95380	.81619	1.16860
10.300	-.015	35.20178	1.24985	.11758	-.15375	-.00372	.00079	-.00389	.95382	.81640	1.16909
10.300	.958	35.20679	1.25040	.11704	-.15405	-.00714	-.00089	-.01117	.95417	.81656	1.16832
GRADIENT		-.01026	.00045	-.00036	-.00016	-.00154	-.00179	-.00753	.00075	-.00023	.00122

REFERENCE DATA

REF = 21.7006 96.1N. 100P = 6.2902 INCHES
LREF = 3.5811 INCHES 100P = .0000 INCHES
BREF = 7.0251 INCHES 200P = .0000 INCHES
SCALE = .0075

RUN NO. 84/ 0 RWL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

W/CH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-6.940	30.29796	.97816	.11337	-.12013	.00785	.01531	.06846	.78832	.59173	1.33224
10.300	-7.958	30.28125	.98307	.11325	-.12121	.00849	.01351	.05791	.79204	.59323	1.33513
10.300	-6.943	30.25526	.98736	.11262	-.12208	.00513	.01196	.04925	.79436	.59332	1.33884
10.300	-5.944	30.21371	.98445	.11025	-.12233	.00249	.01074	.03826	.79493	.59119	1.34462
10.300	-4.972	30.20470	.98780	.11039	-.12336	.00206	.00932	.03101	.79798	.59276	1.34736
10.300	-3.967	30.17686	.96886	.11073	-.12449	.00150	.00771	.02344	.79802	.59189	1.34995
10.300	-2.964	30.17668	.98932	.11028	-.12518	-.00174	.00537	.01692	.79981	.59283	1.34960
10.300	-1.962	30.17593	.99235	.11044	-.12592	-.00191	.00407	.01035	.80289	.59339	1.35305
10.300	-1.003	30.15678	.99173	.10993	-.12629	-.00344	.00240	.00314	.80276	.59242	1.35504
10.300	-.016	30.15661	.99224	.10882	-.12616	-.00487	.00076	-.00332	.80328	.59256	1.35561
10.300	.982	30.16248	.99459	.10956	-.12607	-.00612	-.00092	-.01083	.80450	.59424	1.35582
GRADIENT		-.00667	.00108	-.00023	-.00045	-.00137	-.00173	-.00695	.00112	-.00026	.00130

PARAMETRIC DATA

ALPHA = 30.000 ELEVTR = 10.000
ATLRON = .000 BDFLAP = -14.250

LA-11, CPHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RPD036) (15 AUG 73)

TABULATED SOURCE DATA - CHT96 (LA-11)

LA-11, CHT 96, ROCKWELL CRB. 0698 W/MOD. NOSE

DATE 10 SEP 73

(RPO037) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = 10.000
AILRON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7666 98.1N. XREF = 6.2902 INCHES
LREF = 3.9611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 83/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-9.046	25.20506	.74677	.10514	-.09430	.00803	.01375	.06767	.62185	.40869	1.52084
10.300	-8.033	25.19350	.74031	.10595	-.09616	.00823	.01294	.05705	.62564	.40919	1.52896
10.300	-7.027	25.18924	.74224	.10275	-.09749	.00474	.01166	.04764	.62807	.40667	1.53687
10.300	-6.020	25.16196	.74375	.10148	-.09859	.00345	.01015	.03892	.63003	.40607	1.54391
10.300	-5.022	25.15157	.74320	.10293	-.09966	.00213	.00900	.03093	.63165	.40808	1.54787
10.300	-4.010	25.14990	.74741	.10104	-.10068	.00098	.00729	.02351	.63362	.40910	1.54881
10.300	-3.007	25.13725	.74995	.10056	-.10155	-.00021	.00561	.01654	.63621	.40960	1.55323
10.300	-2.000	25.13614	.75147	.10141	-.10201	-.00132	.00393	.01090	.63723	.41101	1.55041
10.300	-1.006	25.14426	.75265	.10161	-.10225	-.00267	.00216	.00554	.63816	.41178	1.54974
10.300	-0.006	25.13034	.75238	.10170	-.10215	-.00350	.00027	-.00251	.63797	.41160	1.54999
10.300	1.001	25.13298	.75204	.10222	-.10213	-.00457	-.00138	-.00948	.63743	.41195	1.54735
10.300	GRADIENT	-.00278	.00090	.00027	-.00027	-.00111	-.00174	-.00634	.00072	.00060	-.00050

LA-11, CHT 96, ROCKWELL CRB. 0698 W/MOD. NOSE

(RPO038) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 20.000 ELEVTR = 10.000
AILRON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7666 98.1N. XREF = 6.2902 INCHES
LREF = 3.9611 INCHES YREF = .0000 INCHES
BREF = 7.0251 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 82/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-9.083	20.05817	.51635	.09320	-.07225	.00824	.01166	.07027	.45238	.26653	1.69732
10.300	-8.088	20.06387	.51828	.09359	-.07462	.00635	.01137	.05862	.45472	.26371	1.71129
10.300	-7.056	20.06510	.52248	.09244	-.07637	.00476	.01050	.04879	.45905	.26809	1.72517
10.300	-6.044	20.05608	.52383	.09244	-.07752	.00354	.00901	.04127	.46168	.26696	1.72941
10.300	-5.041	20.05953	.52593	.09212	-.07832	.00244	.00755	.03581	.46243	.26692	1.73246
10.300	-4.033	20.04993	.52784	.09208	-.08013	.00136	.00597	.02635	.46428	.26747	1.73586
10.300	-3.029	20.05886	.53061	.09214	-.08148	.00032	.00461	.01871	.46683	.26854	1.73836
10.300	-2.010	20.04923	.53296	.09157	-.08159	-.00081	.00326	.01118	.46927	.26874	1.74820
10.300	-1.013	20.05277	.53297	.09273	-.08176	-.00183	.00173	.00407	.46903	.26940	1.74100
10.300	-0.002	20.05716	.53242	.09225	-.08122	-.00270	.00005	-.00240	.46849	.26925	1.73999
10.300	1.007	20.05407	.53316	.09246	-.08112	-.00349	-.00153	-.00966	.46913	.26968	1.73961
10.300	GRADIENT	.00054	.00091	.00008	-.00012	-.00097	-.00149	-.00713	.00082	.00039	.00053

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TABLED SOURCE DATA - CFT96 (LA-11)

LA-11, CFT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RP0039) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 15.000 ELEVTR = 10.000
ATLON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7886 88.1N. XREF = 6.2902 INCHES
LREF = 3.5611 INCHES YREF = .0000 INCHES
BREF = 7.0231 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 81/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

NACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/C
10.300	-8.050	14.99259	.32596	.03032	-.05533	.00804	.00795	.07967	.23190	.17156	1.69906
10.300	-8.050	14.99057	.32739	.06937	-.05697	.00671	.00736	.06807	.29314	.17101	1.71416
10.300	-7.034	15.00585	.32828	.06766	-.05964	.00591	.00672	.05703	.29439	.16968	1.73492
10.300	-6.022	15.00721	.32840	.06451	-.05948	.00436	.00643	.04575	.29531	.16666	1.77194
10.300	-5.020	15.00335	.32960	.06385	-.06132	.00326	.00531	.03736	.29680	.16646	1.78303
10.300	-4.008	15.00343	.33471	.06378	-.06285	.00217	.00429	.02881	.30155	.16767	1.79844
10.300	-3.006	15.00561	.33607	.06305	-.06392	.00107	.00334	.02065	.30305	.16734	1.81104
10.300	-2.006	15.00650	.33769	.06219	-.06401	.00014	.00239	.01258	.30481	.16699	1.82535
10.300	-1.007	15.00526	.33747	.06093	-.06339	-.00084	.00113	.00460	.30492	.16570	1.84016
10.300	-.004	15.00688	.33801	.06105	-.06341	-.00177	-.00019	-.00221	.30541	.16597	1.84018
10.300	1.000	15.04004	.33833	.06122	-.06331	-.00260	-.00161	-.00953	.30566	.16624	1.83872
GRADT ANT			.00068	-.00057	-.00000		-.00118	-.00765	.00079	-.00036	.00866

(RP0040) (15 AUG 73)

LA-11, CFT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

PARAMETRIC DATA

ALPHA = 10.000 ELEVTR = 10.000
ATLON = .000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7886 88.1N. XREF = 6.2902 INCHES
LREF = 3.5611 INCHES YREF = .0000 INCHES
BREF = 7.0231 INCHES ZREF = .0000 INCHES
SCALE = .0075

RUN NO. 80/ 0 RV/L = 1.00 GRADIENT INTER L = -5.00/ 5.00

NACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/C
10.300	-8.056	9.87145	.15996	.08123	-.03621	.00988	.00458	.06175	.14268	.10727	1.33003
10.300	-7.882	9.89637	.15873	.07980	-.04014	.00766	.00469	.06934	.14269	.10569	1.34999
10.300	-6.859	9.91355	.16076	.07741	-.04118	.00648	.00461	.05847	.14503	.10393	1.39543
10.300	-5.846	9.93525	.16297	.07642	-.04247	.00568	.00433	.04796	.14734	.10339	1.42513
10.300	-4.882	9.94432	.16373	.07539	-.04366	.00404	.00399	.03881	.14825	.10253	1.44591
10.300	-3.957	9.96043	.16595	.07444	-.04504	.00336	.00229	.03204	.15382	.10666	1.44222
10.300	-2.971	9.98912	.17267	.07781	-.04642	.00224	.00182	.02254	.15659	.10653	1.46994
10.300	-1.976	9.98011	.17242	.07686	-.04688	.00123	.00136	.01410	.15649	.10558	1.48221
10.300	-.942	9.97866	.17463	.07781	-.04744	-.00003	.00053	.00376	.15854	.10670	1.48585
10.300	.005	9.98000	.17561	.07873	-.04796	-.00080	-.00065	-.00268	.15930	.10797	1.47538
10.300	.992	9.98491	.17496	.07863	-.04787	-.00171	-.00162	-.01074	.15970	.10778	1.47244
GRADIENT			.00170	.00036	-.00068		-.00086	-.00846	.00160	.00067	.00583



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TABULATED SOURCE DATA - CPHT96 (LA-11)

LA-11, CPHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RP0041) (15 AUG 73)

REFERENCE DATA

REF = 21.7866 SQ. IN. YARP = 6.2902 INCHES
LREF = 3.5611 INCHES YARP = .0000 INCHES
BREF = 7.0251 INCHES ZARP = .0000 INCHES
SCALE = .0073

BETA = .0000 ELEVTR = -10.000
AIRLON = 10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 25/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	ON	CA	LM	ORL	CYN	CY	CL	CD	L/D
10.300	10.078	-.00390	.14833	.07053	-.02368	.00256	-.00142	-.00141	.13370	.09340	1.40148
10.300	15.086	-.00205	.28916	.06933	-.02282	.00370	-.00158	-.00203	.26115	.14220	1.83648
10.300	20.103	.00365	.46208	.07383	-.02502	.00516	-.00196	-.00174	.40855	.22816	1.79064
10.300	25.263	.00550	.66331	.07861	-.03239	.00705	-.00232	-.00256	.56804	.35521	1.55916
10.300	30.170	.01106	.87663	.07839	-.04191	.00861	-.00265	-.00331	.71849	.50833	1.41343
10.300	35.301	.01760	1.12501	.08287	-.06037	.00981	-.00287	-.00354	.86963	.71659	1.21217
GRADIENT		.00087	.03875	.00353	-.00140	.00030	-.00006	-.00015	.02949	.02454	-.01367

(RP0042) (15 AUG 73)

LA-11, CPHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7866 SQ. IN. YARP = 6.2902 INCHES
LREF = 3.5611 INCHES YARP = .0000 INCHES
BREF = 7.0251 INCHES ZARP = .0000 INCHES
SCALE = .0073

BETA = -5.000 ELEVTR = -10.000
AIRLON = 10.000 BOFLAP = -14.250

RUN NO. 25/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	ON	CA	LM	ORL	CYN	CY	CL	CD	L/D
10.300	9.968	-4.93605	.14961	.07168	-.02064	.00716	.00380	.03621	.13494	.09649	1.35348
10.300	15.179	-4.99304	.30253	.07368	-.02312	.00840	.00459	.03624	.27268	.19032	1.81402
10.300	20.149	-5.01006	.47656	.07571	-.02511	.01048	.00618	.03264	.42132	.23523	1.79108
10.300	25.102	-4.96363	.66786	.07859	-.03070	.01345	.00624	.03282	.57145	.35449	1.61203
10.300	30.319	-4.91086	.89711	.08136	-.04120	.01614	.00587	.03042	.73333	.52311	1.40186
10.300	35.332	-4.80319	1.13652	.08394	-.06072	.01779	.00541	.03158	.87827	.72619	1.20942
GRADIENT		.00329	.03696	.00249	-.00147	.00045	.00007	-.00024	.02959	.02474	-.01328

TABULATED SOURCE DATA - CFTHT96 (LA-11)

LA-11, CFTHT 96, ROCKWELL ORB. 0098 W/MOD. NOSE

(RPD043) (15 AUG 73)

REFERENCE DATA

REF = 21.7046 IN. YARP = 6.2902 INCHES
 LREF = 3.9411 INCHES YARP = .0000 INCHES
 BREF = 7.0251 INCHES ZARP = .0000 INCHES
 SCALE = .0075

PARAMETRIC DATA

ALPHA = 10.000 ELEVTR = -10.000
 ATURON = 10.000 BOFLAP = -14.250

RUN NO. 31/ 0 RNVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
17.300	-6.930	2.82066	.13065	.07421	-.01828	.01123	.00406	.06064	.11608	.09110	1.21673
18.300	-7.908	9.84146	.13437	.07329	-.01979	.00992	.00429	.06750	.11987	.09518	1.25942
19.300	-8.931	9.86756	.13502	.07077	-.02078	.00870	.00417	.05778	.12090	.09286	1.30185
10.300	-5.984	9.86817	.13478	.06905	-.02181	.00765	.00368	.04720	.12092	.09117	1.32835
10.300	-4.949	9.89847	.13443	.06851	-.02186	.00654	.00346	.03823	.12165	.09060	1.33177
10.300	-3.947	9.90926	.13932	.06629	-.02189	.00578	.00265	.02977	.12549	.09124	1.37534
10.300	-2.957	9.92258	.14102	.06990	-.02238	.00523	.00119	.02301	.12687	.09315	1.35197
10.300	-1.997	9.92977	.13957	.06704	-.02227	.00420	.00789	.01447	.12592	.09011	1.39743
10.300	-1.000	9.92940	.14281	.06936	-.02281	.00334	-.00010	.00633	.12871	.09295	1.38473
10.300	-.022	9.93040	.14429	.07091	-.02269	.00269	-.00125	-.00138	.12890	.09475	1.37121
10.300	1.006	9.92703	.14276	.07030	-.02332	.00186	-.00224	-.00912	.12851	.09386	1.36914
10.300	GRADIENT	.00466	.00132	.00037	-.00226	-.00060	-.00094	-.00796	.00123	.00060	.00453

LA-11, CFTHT 96, ROCKWELL ORB. 0098 W/MOD. NOSE

(RPD044) (15 AUG 73)

REFERENCE DATA

REF = 21.7046 IN. YARP = 6.2902 INCHES
 LREF = 3.9411 INCHES YARP = .0000 INCHES
 BREF = 7.0251 INCHES ZARP = .0000 INCHES
 SCALE = .0075

PARAMETRIC DATA

ALPHA = 15.000 ELEVTR = -10.000
 ATURON = 10.000 BOFLAP = -14.250

RUN NO. 30/ 0 RNVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-9.046	14.97671	.28800	.07963	-.02028	.01261	.00851	.07895	.25197	.14958	1.68449
10.300	-8.015	14.93130	.27986	.07745	-.02137	.01133	.00591	.06776	.25026	.14689	1.70369
10.300	-7.032	14.94156	.28156	.07511	-.02233	.01036	.00536	.05725	.25267	.14517	1.74056
10.300	-6.016	14.94842	.27706	.07026	-.02178	.00913	.00648	.04203	.24956	.13935	1.79102
10.300	-5.046	14.96255	.28289	.07228	-.02250	.00844	.00433	.03680	.25445	.14282	1.78164
10.300	-3.985	14.95678	.28432	.07182	-.02393	.00732	.00311	.02692	.25635	.14282	1.79494
10.300	-3.003	14.96857	.28325	.07054	-.02420	.00639	.00222	.02070	.25542	.14130	1.80762
10.300	-2.028	14.98968	.28105	.06816	-.02328	.00572	.00169	.01121	.25443	.13652	1.86372
10.300	-1.009	14.97330	.28651	.06993	-.02319	.00453	.00007	.00518	.25898	.14062	1.84167
10.300	-.028	14.98724	.28575	.06796	-.02284	.00365	-.00038	-.00091	.25844	.13954	1.85202
10.300	1.006	14.97546	.28425	.06643	-.02275	.00267	-.00291	-.00816	.25691	.13956	1.84086
10.300	GRADIENT	.00433	.00033	-.00062	.00029	-.00093	-.00122	-.00731	.00047	-.00049	.00961

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LABULATED SOURCE DATA - CPNT96 (LA-11)

LA-11, CPNT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

(RP0045) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 20.000 ELEVTR = -10.000
 ATUNON = 10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7866 96. IN. 100P = 6.2802 INCHES
 UNDF = 3.5811 INCHES 100P = .0000 INCHES
 REF = 7.0231 INCHES 200P = .0000 INCHES
 SCALE = .0075

RUN NO. 29/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	ALPHA	ON	CA	QLN	QBL	CYN	CY	CL	CD	L/O
10.300	-9.082	20.09626	.44249	.07734	-.02804	.01629	.01014	.00650	.38898	.22468	1.73128
10.300	-8.036	20.08345	.44107	.07502	-.02335	.01431	.01006	.05456	.38849	.22191	1.73062
10.300	-7.041	20.07982	.44445	.07376	-.02435	.01277	.00927	.04579	.39212	.22104	1.76756
10.300	-6.035	20.08345	.44820	.07358	-.02462	.01149	.00764	.03965	.39585	.22255	1.77874
10.300	-5.064	20.08691	.45351	.07348	-.02701	.01051	.00591	.03390	.40069	.22477	1.78267
10.300	-4.046	20.08333	.45453	.07367	-.02600	.00936	.00408	.02753	.40180	.22327	1.78273
10.300	-3.011	20.07837	.45562	.07335	-.02623	.00821	.00270	.01911	.40275	.22351	1.78757
10.300	-1.979	20.07347	.45850	.07357	-.02607	.00716	.00137	.01189	.40540	.22647	1.79009
10.300	-1.026	20.07793	.45748	.07327	-.02555	.00612	-.00007	.00575	.40452	.22587	1.79370
10.300	-0.013	20.07336	.45962	.07294	-.02383	.00520	-.00171	-.00127	.40666	.22626	1.79750
10.300	.996	20.07846	.45565	.07201	-.02477	.00407	-.00331	-.00766	.40324	.22406	1.79969
	GRADIENT	-.00101	.00048	-.00028	.00027	-.00104	-.00147	-.00692	.00055	-.00011	.00327

LA-11, CPNT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

(RP0046) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = -10.000
 ATUNON = 10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7866 96. IN. 100P = 6.2802 INCHES
 UNDF = 3.5811 INCHES 100P = .0000 INCHES
 REF = 7.0231 INCHES 200P = .0000 INCHES
 SCALE = .0075

RUN NO. 29/ 3 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	ALPHA	ON	CA	QLN	QBL	CYN	CY	CL	CD	L/O
10.300	-9.008	25.17276	.63263	.06756	-.02855	.01920	.01071	.05644	.53828	.34200	1.57591
10.300	-8.021	25.19180	.63036	.07950	-.02910	.01734	.00995	.05674	.54225	.34244	1.58351
10.300	-6.980	25.13469	.63756	.07600	-.02961	.01575	.00903	.04703	.54360	.34120	1.59319
10.300	-6.027	25.12304	.67858	.07632	-.03001	.01459	.00762	.03536	.54555	.34067	1.60142
10.300	-5.063	25.11168	.67651	.07622	-.03029	.01325	.00631	.03207	.54400	.33915	1.60403
10.300	-4.064	25.10276	.67919	.07639	-.03075	.01191	.00473	.02398	.54653	.34008	1.60708
10.300	-3.006	25.08253	.67977	.07456	-.03077	.01075	.00313	.01718	.54761	.33920	1.61442
10.300	-1.956	25.06676	.64155	.07513	-.03175	.00903	.00121	.01135	.54918	.34003	1.61498
10.300	-0.013	25.08423	.64395	.07731	-.03237	.00795	-.00335	.00474	.55217	.34405	1.60192
10.300	.004	25.08505	.64143	.07688	-.03217	.00685	-.00216	-.00177	.54833	.34157	1.60533
10.300	1.014	25.08243	.64435	.07122	-.03235	.00577	-.00373	-.00913	.55063	.34310	1.60347
	GRADIENT	-.00219	.07100	.00038	-.00037	-.00124	-.00170	-.00634	.00076	.00074	-.00128

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08P0047 (15 AUG 73)

LA-11, CPMT 96, ROCKWELL CRB. 0098 W/MTC. NOSE

PARAMETRIC DATA

ALPHA = 30.000 ELEVTR = -10.000
 ALURON = 10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7886 86. IN. WWP = 6.2902 INCHES
 LREF = 3.5411 INCHES WWP = .0000 INCHES
 SREF = 7.0251 INCHES ZWP = .0000 INCHES
 SCALE = .0075

RUN NO. 27/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-6.728	30.37882	.08143	.08360	-.04083	.01225	.01225	.06583	.71819	.51780	1.38700
10.300	-7.815	30.34544	.08141	.08231	-.04087	.01225	.01225	.05686	.71907	.51633	1.39284
10.300	-6.936	30.31421	.08123	.08165	-.04066	.01225	.01225	.04851	.71953	.51528	1.39638
10.300	-5.916	30.29266	.08123	.08081	-.04036	.01225	.01225	.03975	.72022	.51415	1.40080
10.300	-4.936	30.27183	.08218	.07961	-.04036	.01225	.01225	.03136	.72165	.51364	1.40498
10.300	-3.973	30.25112	.08481	.08035	-.04117	.01225	.01225	.02483	.72375	.51530	1.40453
10.300	-2.937	30.23277	.08680	.07971	-.04210	.01225	.01225	.01790	.72605	.51556	1.40826
10.300	-1.974	30.21709	.08941	.07996	-.04255	.01225	.01225	.01185	.72863	.51612	1.41175
10.300	-.899	30.20513	.09209	.07968	-.04259	.01225	.01225	.00735	.73059	.51559	1.41312
10.300	.008	30.20073	.09480	.07948	-.04237	.01225	.01225	-.00353	.73287	.51548	1.41378
10.300	1.008	30.20003	.09722	.07922	-.04301	.01225	.01225	-.00866	.73521	.51777	1.41222
10.300	GRADIENT	-.00739	.00130	-.00024	-.00036	-.00150	-.00175	-.00703	.00149	.00046	.00162

08P0048 (15 AUG 73)

LA-11, CPMT 96, ROCKWELL CRB. 0098 W/MTC. NOSE

PARAMETRIC DATA

ALPHA = 35.000 ELEVTR = -10.000
 ALURON = 10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7886 86. IN. WWP = 6.2902 INCHES
 LREF = 3.5411 INCHES WWP = .0000 INCHES
 SREF = 7.0251 INCHES ZWP = .0000 INCHES
 SCALE = .0075

RUN NO. 28/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-6.728	35.41840	1.18098	.08487	-.08088	.01133	.01133	.06459	.86414	.71843	1.20282
10.300	-7.717	35.37655	1.12541	.08408	-.08084	.01033	.01033	.05628	.86895	.72009	1.20673
10.300	-6.774	35.34167	1.12748	.08365	-.08019	.00994	.00994	.04846	.87132	.72043	1.20945
10.300	-5.813	35.31175	1.13294	.08382	-.07989	.00948	.00948	.04080	.87559	.72270	1.21155
10.300	-4.830	35.28484	1.13416	.08394	-.07979	.00914	.00914	.03311	.87731	.72366	1.21253
10.300	-3.882	35.25765	1.13471	.08311	-.07969	.00854	.00854	.02564	.87859	.72288	1.21340
10.300	-2.907	35.24588	1.13682	.08319	-.07960	.00794	.00794	.01832	.88025	.72387	1.21603
10.300	-1.925	35.22215	1.13582	.08270	-.08039	.00733	.00733	.01053	.88026	.72270	1.21802
10.300	-.894	35.22687	1.13663	.08264	-.08049	.00686	.00686	.00275	.88081	.72314	1.21805
10.300	.027	35.21364	1.13444	.08261	-.08076	.00697	.00697	-.00466	.88249	.72395	1.21897
10.300	.981	35.22004	1.13634	.08280	-.08084	.00650	.00650	-.01175	.88249	.72409	1.21875
10.300	GRADIENT	-.01109	.00076	-.00020	-.00080	-.00168	-.00169	-.00776	.00038	.00019	.00105

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TABULATED SOURCE DATA - CPHT96 (LA-11)

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LA-11, CPHT 96, ROCKWELL CRB. 0698 W/MOD. NOSE

(RPDD49) (15 AUG 73)

REFERENCE DATA

REF = 21.7886 96. IN. XARP = 6.2502 INCHES
 LREF = 3.5611 INCHES YARP = .0000 INCHES
 BREF = 7.0231 INCHES ZARP = .0000 INCHES
 SCALE = .0075

BETA = .000 ELEVTR = -10.000
 ALLRON = -10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 41/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	BETA	CN	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	10.114	-.00121	.14236	.06634	-.02194	-.00120	-.00094	-.00260	.12816	.09228	1.38869
10.300	15.096	-.00114	.27674	.06623	-.01986	-.00254	-.00076	-.00390	.13801	.13763	1.63763
10.300	20.185	-.00257	.44130	.07302	-.02145	-.00433	-.00071	-.00361	.38900	.22081	1.76169
10.300	25.195	-.00642	.62971	.07816	-.02883	-.00649	-.00042	-.00316	.53739	.33696	1.59482
10.300	30.227	-.01325	.83636	.07382	-.03310	-.00938	.00003	-.00690	.68449	.48655	1.40581
10.300	35.405	-.02197	1.07264	.07959	-.04993	-.01217	.00057	-.00870	.82818	.68630	1.20674
GRADIENT		-.00082	.03667	.00050	-.00108	-.00044	.00006	-.00223	.02800	.02342	-.01347

LA-11, CPHT 96, ROCKWELL CRB. 0698 W/MOD. NOSE

(RPDD50) (15 AUG 73)

REFERENCE DATA

REF = 21.7886 96. IN. XARP = 6.2502 INCHES
 LREF = 3.5611 INCHES YARP = .0000 INCHES
 BREF = 7.0231 INCHES ZARP = .0000 INCHES
 SCALE = .0075

BETA = -5.000 ELEVTR = -10.000
 ALLRON = -10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 42/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	BETA	CN	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	9.844	-4.87986	.14397	.08982	-.01724	.00310	.00363	.03502	.12995	.09321	1.39414
10.300	14.971	-4.95961	.28708	.07167	-.01909	.00166	.00900	.03454	.25882	.14340	1.60490
10.300	20.114	-4.95999	.45972	.07545	-.02045	.00048	.00630	.03267	.40480	.22860	1.77074
10.300	25.382	-4.94220	.63334	.07597	-.02473	-.00079	.00787	.02757	.55771	.34869	1.59545
10.300	30.360	-4.88505	.86196	.07858	-.03297	-.00254	.00834	.02700	.70386	.50371	1.39734
10.300	35.471	-4.79226	1.09134	.08082	-.04829	-.00463	.00858	.02754	.84190	.68912	1.20423
GRADIENT		.00343	.03704	.00043	-.00112	-.00029	.00020	-.00036	.02810	.02353	-.01300

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TABULATED SOURCE DATA - CFHT96 (LA-11)

LA-11, CFHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

(RP0053) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 20.000 ELEVTR = -10.000
 AILRON = -10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7886 SQ. IN. XPRP = 6.2902 INCHES
 LREF = 3.5611 INCHES YPRP = .0000 INCHES
 BREF = 7.0251 INCHES ZPRP = .0000 INCHES
 SCALE = .0075

RUN NO. 46/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WMOH	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-9.076	20.10234	.49906	.07740	-.01571	.00671	.01084	.08901	.38571	.22359	1.72511
10.300	-8.080	20.09450	.44100	.07495	-.01781	.00482	.01064	.05733	.38941	.22190	1.75038
10.300	-7.055	20.08455	.44662	.07472	-.01902	.00310	.00998	.04790	.39395	.22368	1.76121
10.300	-6.044	20.08685	.44952	.07472	-.01978	.00180	.00845	.04105	.39650	.22458	1.76551
10.300	-5.059	20.09257	.45337	.07602	-.02053	.00081	.00632	.03563	.39967	.22713	1.75969
10.300	-4.090	20.10212	.45500	.07578	-.02132	-.00045	.00516	.02704	.40124	.22754	1.76336
10.300	-3.086	20.10345	.45814	.07531	-.02186	-.00154	.00391	.01928	.40434	.22819	1.77191
10.300	-2.021	20.10468	.45799	.07488	-.02177	-.00264	.00263	.01169	.40434	.22774	1.77544
10.300	-1.012	20.09799	.45981	.07477	-.02171	-.00364	.00113	.00428	.40811	.22822	1.77946
10.300	0.009	20.09582	.45978	.07485	-.02171	-.00454	-.00082	-.00327	.40607	.22827	1.77694
10.300	1.006	20.09699	.45936	.07494	-.02214	-.00538	-.00213	-.00936	.40564	.22822	1.77743
10.300	GRADIENT	-.00157	.00081	-.00016	-.00010	-.00098	-.00146	-.00728	.00082	.00012	.00270

LA-11, CFHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

(RP0054) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = -10.000
 AILRON = -10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7886 SQ. IN. XPRP = 6.2902 INCHES
 LREF = 3.5611 INCHES YPRP = .0000 INCHES
 BREF = 7.0251 INCHES ZPRP = .0000 INCHES
 SCALE = .0075

RUN NO. 45/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WMOH	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-9.031	25.10329	.63596	.08042	-.02136	.00569	.01287	.06726	.54119	.34359	1.57513
10.300	-8.018	25.10100	.64003	.07869	-.02226	.00396	.01184	.05723	.54573	.34353	1.58859
10.300	-7.017	25.10812	.64332	.07796	-.02297	.00253	.01068	.04780	.54909	.34415	1.59549
10.300	-6.027	25.15417	.64268	.07650	-.02372	.00104	.00931	.03690	.54921	.34242	1.60391
10.300	-5.030	25.15135	.64444	.07623	-.02424	-.00031	.00791	.03115	.55094	.34290	1.60672
10.300	-4.009	25.14003	.64573	.07572	-.02482	-.00165	.00650	.02330	.55239	.34287	1.61108
10.300	-3.012	25.13265	.64909	.07716	-.02611	-.00311	.00469	.01743	.55487	.34553	1.60584
10.300	-2.012	25.12625	.64973	.07811	-.02690	-.00436	.00306	.01040	.55508	.34660	1.60149
10.300	-1.012	25.14091	.65099	.07737	-.02715	-.00545	.00141	.00337	.55637	.34679	1.60433
10.300	-.013	25.12482	.65217	.07778	-.02713	-.00646	-.00033	-.00323	.55744	.34732	1.60497
10.300	.998	25.12756	.65293	.07811	-.02737	-.00760	-.00195	-.01056	.55797	.34797	1.60348
10.300	GRADIENT	-.00205	.00133	.00038	-.00046	-.00117	-.00168	-.00680	.00105	.00089	-.00108

LA-11, CFHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RPD055) (15 AUG 75)

REFERENCE DATA

MACH = 21.7866 90.1N. 100P = 6.2902 INCHES
 REF = 3.5611 INCHES 100P = .0000 INCHES
 REF = 7.0251 INCHES 200P = .0000 INCHES
 SCALE = .0075

ALPHA = 30.000 ELEVTR = -10.000
 ATLRON = -10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 44/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-6.925	30.45577	.85319	.08181	-.03226	.00413	.01412	.06474	.69400	.50298	1.37978
10.300	-7.937	30.42444	.85767	.08147	-.03308	.00241	.01278	.05664	.69831	.50458	1.36397
10.300	-6.952	30.39837	.85928	.08060	-.03309	.00109	.01109	.04834	.70037	.50433	1.36872
10.300	-5.932	30.38428	.86068	.07976	-.03288	-.00037	.00968	.03981	.70230	.50424	1.39280
10.300	-4.963	30.36943	.86187	.07873	-.03316	-.00215	.00834	.03138	.70381	.50367	1.39736
10.300	-3.989	30.35196	.86346	.07891	-.03351	-.00349	.00686	.02340	.70524	.50440	1.39816
10.300	-2.969	30.33402	.86562	.07896	-.03429	-.00498	.00523	.01619	.70723	.50532	1.39957
10.300	-1.995	30.35649	.86851	.07812	-.03504	-.00639	.00344	.00966	.71013	.50609	1.40318
10.300	-1.007	30.32707	.86990	.07781	-.03530	-.00791	.00173	.00966	.71071	.50590	1.40483
10.300	-.015	30.32644	.87122	.07742	-.03591	-.00962	.00019	-.00421	.71291	.50673	1.40688
10.300	.977	30.33375	.87149	.07802	-.03628	-.01089	-.00137	-.01197	.71278	.50747	1.40456
GRADIENT		-.00595	.00172	-.00723	-.00055	-.00149	-.00166	-.00718	.00165	.00060	.00160

LA-11, CFHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RPD056) (15 AUG 75)

REFERENCE DATA

MACH = 21.7866 90.1N. 100P = 6.2902 INCHES
 REF = 3.5611 INCHES 100P = .0000 INCHES
 REF = 7.0251 INCHES 200P = .0000 INCHES
 SCALE = .0075

ALPHA = 35.000 ELEVTR = -10.000
 ATLRON = -10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 43/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-6.755	35.35501	1.06417	.08226	-.04662	.00200	.01484	.06271	.82031	.68286	1.20129
10.300	-7.769	35.31706	1.07115	.08201	-.04717	.00042	.01340	.05491	.82661	.68615	1.20472
10.300	-6.831	35.27950	1.07800	.08127	-.04731	-.00124	.01188	.04719	.83144	.68781	1.20883
10.300	-5.848	35.25031	1.08027	.08191	-.04728	-.00282	.01024	.03917	.83492	.69037	1.20938
10.300	-4.881	35.23569	1.08252	.08114	-.04759	-.00426	.00838	.03168	.83738	.69082	1.21214
10.300	-3.894	35.21022	1.08303	.08178	-.04731	-.00586	.00685	.02356	.83814	.69070	1.21346
10.300	-2.931	35.18936	1.08374	.08122	-.04783	-.00736	.00538	.01584	.83888	.69092	1.21415
10.300	-1.961	35.18323	1.08550	.08073	-.04855	-.00920	.00394	.00799	.84076	.69149	1.21587
10.300	-.998	35.17722	1.08712	.08058	-.04905	-.01077	.00231	.00044	.84216	.69216	1.21671
10.300	-.023	35.17508	1.08719	.08024	-.04979	-.01216	.00039	-.00682	.84244	.69190	1.21758
10.300	.951	35.18158	1.08719	.08082	-.05041	-.01362	-.00110	-.01406	.84203	.69246	1.21599
GRADIENT		-.00901	.00395	-.00012	-.00034	-.00162	-.00164	-.00785	.00095	.00031	.00082

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TABULATED SOURCE DATA - CFHT96 (LA-11)

LA-11, CFHT 96, ROCKWELL CRB. 0898 W/MOD. NOSE
(RP0057) (15 AUG 73)

REFERENCE DATA

SREF = 21.7886 98.IN. XGRP = 6.2902 INCHES
 LREF = 3.5611 INCHES YGRP = .0000 INCHES
 BREF = 7.0251 INCHES ZGRP = .0000 INCHES
 SCALE = .0075

BETA = .0000 ELEVTR = -30.000
 AIRRON = -10.000 BDFLAP = -14.250

PARAMETRIC DATA

RUN NO. 54/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	ON	CA	CLM	CRB	CYN	CY	CL	CD	L/D
10.300	9.931	-.00111	.13435	.07214	-.01651	-.00059	-.00171	-.00139	.12039	.09432	1.27642
10.300	15.013	-.00151	.27567	.06915	-.01269	-.00080	-.00142	-.00292	.24835	.13820	1.79708
10.300	20.146	-.00175	.44059	.07374	-.00829	-.00156	-.00147	-.00300	.38823	.22099	1.75678
10.300	25.068	-.00226	.62795	.07865	-.00810	-.00255	-.00162	-.00377	.53530	.33758	1.58571
10.300	30.182	-.00362	.83680	.07766	-.01007	-.00390	-.00172	-.00562	.68431	.46783	1.40276
10.300	35.356	-.00696	1.07461	.08129	-.01851	-.00639	-.00155	-.00769	.82937	.66813	1.20325
GRADIENT		-.00026	.03700	.00043	-.00001	-.00022	-.00000	-.00023	.02815	.02329	-.00962

(RP0058) (15 AUG 73)

LA-11, CFHT 96, ROCKWELL CRB. 0898 W/MOD. NOSE

PARAMETRIC DATA

SREF = 21.7886 98.IN. XGRP = 6.2902 INCHES
 LREF = 3.5611 INCHES YGRP = .0000 INCHES
 BREF = 7.0251 INCHES ZGRP = .0000 INCHES
 SCALE = .0075

BETA = -5.000 ELEVTR = -30.000
 AIRRON = -10.000 BDFLAP = -14.250

RUN NO. 55/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	BETA	ON	CA	CLM	CRB	CYN	CY	CL	CD	L/D
10.300	10.037	-4.90322	.13965	.07359	-.01257	.00336	.00344	.00683	.12469	.09680	1.26807
10.300	15.036	-4.99100	.28455	.07404	-.01086	.00331	.00474	.00536	.25560	.14532	1.75896
10.300	20.069	-5.01133	.45322	.07602	-.00726	.00328	.00630	.00303	.39961	.22693	1.76099
10.300	25.132	-4.99084	.64353	.07839	-.00518	.00340	.00681	.00308	.54931	.34428	1.59554
10.300	30.318	-4.98791	.89972	.08044	-.00732	.00290	.00673	.02942	.70154	.50342	1.39355
10.300	35.431	-4.83088	1.08233	.08179	-.01765	.00115	.00658	.03071	.84263	.69889	1.20395
GRADIENT		.00411	.03757	.00035	-.00007	-.00007	.00012	-.00029	.02855	.02368	-.00959

TABULATED SOURCE DATA - CPHT96 (LA-11)

LA-11, CPHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RP0059) (15 AUG 75)

REFERENCE DATA

REF = 21.7866 IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

PARAMETRIC DATA

ALPHA = 10.000 ELEVTR = -30.000
 AILTRON = -10.000 BOFLAP = -14.250

RUN NO. 61/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACI	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-8.919	9.86020	.11530	.07514	-.00940	.00704	.00331	.06078	.10073	.09378	1.07413
10.300	-7.933	9.86836	.11460	.07500	-.01069	.00592	.00352	.06946	.10339	.09156	1.09650
10.300	-6.932	9.90055	.11677	.07151	-.01205	.00479	.00351	.05817	.10274	.09052	1.13489
10.300	-5.949	9.91339	.11782	.06894	-.01315	.00387	.00331	.04799	.10382	.08914	1.16468
10.300	-4.964	9.93794	.11993	.06914	-.01401	.00297	.00303	.03885	.10620	.08860	1.19569
10.300	-3.960	9.94832	.12569	.07120	-.01456	.00253	.00117	.03284	.11150	.09164	1.21402
10.300	-2.969	9.95878	.12855	.07060	-.01522	.00190	.00074	.02967	.11440	.09177	1.24666
10.300	-1.973	9.96128	.12658	.06723	-.01501	.00106	.00060	.01361	.11304	.08811	1.28297
10.300	-.966	9.96503	.12995	.06864	-.01543	.00022	-.00036	.00594	.11611	.09010	1.28674
10.300	.005	9.96644	.13146	.07049	-.01647	-.00043	-.00159	-.00143	.11727	.09218	1.27220
10.300	.995	9.97042	.13103	.07027	-.01598	-.00104	-.00243	-.00932	.11688	.09189	1.27198
10.300	GRADIENT	.00504	.02167	.00000	-.00036	-.00071	-.00063	-.00830	.00163	.00030	.01393

LA-11, CPHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RP0060) (15 AUG 75)

PARAMETRIC DATA

ALPHA = 15.000 ELEVTR = -30.000
 AILTRON = -10.000 BOFLAP = -14.250

REF = 21.7866 IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

RUN NO. 60/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACI	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-8.085	14.91680	.25770	.07825	-.00853	.00737	.00600	.07899	.22888	.14195	1.61240
10.300	-6.017	14.96837	.25970	.07572	-.01011	.00641	.00555	.06804	.23047	.13980	1.64850
10.300	-7.012	14.93535	.26080	.07446	-.01091	.00530	.00499	.09734	.23222	.13900	1.67057
10.300	-8.012	14.94130	.25804	.07005	-.01077	.00426	.00825	.04245	.22932	.13369	1.71528
10.300	-5.016	14.93024	.25858	.06992	-.01056	.00368	.00447	.03564	.23179	.13427	1.72634
10.300	-4.005	14.95957	.26306	.07075	-.01289	.00270	.00295	.02933	.23588	.13626	1.73116
10.300	-3.005	14.96575	.26424	.06904	-.01296	.00179	.00213	.02067	.23745	.13493	1.75979
10.300	-2.001	14.96471	.26407	.06911	-.01259	.00113	.00136	.01215	.23753	.13399	1.77270
10.300	-1.010	14.96773	.26822	.06751	-.01243	.00060	.00019	.00529	.23975	.13398	1.78949
10.300	-.004	14.96846	.26787	.06727	-.01303	-.00055	-.00126	-.00185	.24137	.13423	1.79819
10.300	1.009	14.97369	.26870	.06779	-.01307	-.00127	-.00268	-.00928	.24206	.13491	1.79417
10.300	GRADIENT	.00356	.00118	-.00059	-.00003	-.00079	-.00113	-.00765	.00128	-.00025	.01274



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TABULATED SOURCE DATA - CPHT96 (LA-11)

LA-11, CPHT 96, ROCKWELL CRB, 0898 W/MOD, NOSE

(RP0061) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 20.000 ELEVTR = -30.000
AHLRON = -10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7006 96.1N. XPRP = 6.2902 INCHES
LREF = 3.9811 INCHES YPRP = .0000 INCHES
BREF = 7.0231 INCHES ZPRP = .0000 INCHES
SCALE = .0075

RUN NO. 59/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CR	CYN	CY	CL	CD	L/D
10.300	-9.008	20.07877	.42449	.07817	-.00407	.00807	.01049	.06794	.37185	.21916	1.09672
10.300	-6.080	20.07282	.48726	.07846	-.00584	.00750	.01015	.05699	.37507	.21846	1.71698
10.300	-7.042	20.07047	.43314	.07561	-.00670	.00577	.00921	.04806	.36089	.21966	1.73396
10.300	-6.045	20.07032	.43495	.07468	-.00731	.00455	.00763	.04060	.36291	.21941	1.74519
10.300	-5.041	20.06875	.43774	.07490	-.00776	.00354	.00598	.03423	.36545	.22057	1.74753
10.300	-4.030	20.07127	.44066	.07550	-.00861	.00247	.00429	.02712	.36799	.22214	1.74656
10.300	-3.026	20.05956	.44185	.07493	-.00904	.00143	.00302	.01696	.36935	.22194	1.75429
10.300	-2.019	20.06863	.44286	.07439	-.00896	.00043	.00167	.01180	.39046	.22185	1.76001
10.300	-1.013	20.06753	.44319	.07496	-.00860	-.00082	.00029	.00454	.39056	.22250	1.75530
10.300	.003	20.06480	.44224	.07327	-.00861	-.00141	-.00142	-.00225	.39026	.22055	1.76953
10.300	1.009	20.06827	.44016	.07202	-.00737	-.00256	-.00324	-.00816	.36872	.21968	1.77757
GRADIENT		-.00004	-.00003	-.00062	.00025	-.00098	-.00148	-.00701	.00016	-.00059	.00556

LA-11, CPHT 96, ROCKWELL CRB, 0898 W/MOD, NOSE

(RP0062) (15 AUG 73)

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = -30.000
AHLRON = -10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 21.7006 96.1N. XPRP = 6.2902 INCHES
LREF = 3.9811 INCHES YPRP = .0000 INCHES
BREF = 7.0231 INCHES ZPRP = .0000 INCHES
SCALE = .0075

RUN NO. 59/ 0 RV/L = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	ALPHA	ON	CA	CLM	CR	CYN	CY	CL	CD	L/D
10.300	-9.008	25.24288	.62086	.08144	-.00560	.00950	.01132	.06863	.52685	.33843	1.55671
10.300	-6.032	25.22674	.62372	.08043	-.00493	.00781	.01063	.06010	.52996	.33859	1.56520
10.300	-7.031	25.21866	.62566	.07934	-.00534	.00633	.00963	.04980	.53240	.33844	1.57399
10.300	-6.035	25.20528	.62849	.07784	-.00565	.00492	.00818	.04115	.53550	.33806	1.58396
10.300	-5.030	25.19850	.62826	.07665	-.00623	.00393	.00677	.03302	.53584	.33685	1.59077
10.300	-4.011	25.18712	.62968	.07672	-.00653	.00282	.00536	.02475	.53716	.33741	1.59203
10.300	-3.002	25.17941	.63052	.07642	-.00656	.00142	.00370	.01740	.53810	.33741	1.59477
10.300	-2.016	25.17268	.63000	.07609	-.00685	-.00021	.00187	.01175	.54236	.34120	1.58963
10.300	-1.008	25.17561	.63501	.07782	-.00664	-.01137	.00024	.00467	.54159	.34054	1.59042
10.300	-.003	25.17184	.63631	.07825	-.00661	-.00233	-.00153	-.00236	.54260	.34146	1.58908
10.300	1.003	25.17060	.63643	.07821	-.00697	-.00334	-.00320	-.00968	.54273	.34147	1.58940
GRADIENT		-.00094	.00143	.00036	-.00032	-.00120	-.00171	-.00680	.00115	.00090	-.00084

TABULATED SOURCE DATA - CFHT96 (LA-11)

LA-11, CFHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

(RPD063) (15 AUG 73)

REFERENCE DATA

WARP = 21.7888 IN. WARP = 6.2902 INCHES
 WARP = 3.5611 INCHES WARP = .0000 INCHES
 WARP = 7.0251 INCHES WARP = .0000 INCHES
 SCALE = .0075

PARAMETRIC DATA

ALPHA = 30.000 ELEVTR = -30.000
 ATLRON = -10.000 BOFLAP = -14.250

RUN NO. 57/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-6.916	30.37353	.63762	.08287	-.00760	.00965	.01276	.06632	.66092	.49513	1.37524
10.300	-7.834	30.34058	.63921	.08109	-.00761	.00746	.01111	.05803	.68331	.49390	1.38349
10.300	-8.835	30.32554	.64013	.08072	-.00774	.00627	.00950	.04869	.68442	.49387	1.38563
10.300	-9.845	30.32555	.64260	.07975	-.00741	.00469	.00802	.04034	.68748	.49402	1.39161
10.300	-4.982	30.28628	.64375	.07954	-.00712	.00334	.00664	.03174	.68846	.49420	1.39310
10.300	-3.961	30.26617	.64555	.07961	-.00790	.00186	.00515	.02421	.69017	.49493	1.39449
10.300	-2.977	30.28092	.64662	.07885	-.00866	.00036	.00348	.01746	.69325	.49576	1.39836
10.300	-1.975	30.24981	.65144	.07814	-.00959	-.00099	.00167	.01050	.69614	.49643	1.40230
10.300	-.999	30.24819	.65128	.07793	-.00970	-.00234	.00002	.00302	.69612	.49614	1.40306
10.300	-.002	30.25036	.65168	.07704	-.00995	-.00363	-.00168	-.00428	.69690	.49561	1.40614
10.300	.946	30.24996	.65423	.07812	-.01043	-.00580	-.00317	-.01115	.69857	.49781	1.40329
10.300	GRADIENT	-.00564	.00168	-.00037	-.00054	-.00145	-.00169	-.00722	.00168	.00045	.00211

(RPD064) (15 AUG 73)

LA-11, CFHT 96, ROCKWELL ORB. 0698 W/MOD. NOSE

REFERENCE DATA

WARP = 21.7888 IN. WARP = 6.2902 INCHES
 WARP = 3.5611 INCHES WARP = .0000 INCHES
 WARP = 7.0251 INCHES WARP = .0000 INCHES
 SCALE = .0075

PARAMETRIC DATA

ALPHA = 35.000 ELEVTR = -30.000
 ATLRON = -10.000 BOFLAP = -14.250

RUN NO. 56/ 0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CEL	CYN	CY	CL	CD	L/D
10.300	-6.743	35.62656	1.07823	.08281	-.01869	.00760	.01307	.06999	.82618	.69537	1.19088
10.300	-7.739	35.59877	1.08529	.08213	-.01882	.00607	.01149	.05773	.83473	.69444	1.19513
10.300	-8.791	35.58035	1.08784	.08096	-.01838	.00451	.01004	.04940	.83788	.69850	1.19953
10.300	-9.869	35.58451	1.09107	.08157	-.01787	.00299	.00837	.04176	.84059	.70035	1.20084
10.300	-4.850	35.49780	1.09230	.08150	-.01787	.00154	.00657	.03358	.84196	.70062	1.20174
10.300	-3.874	35.47773	1.09571	.08155	-.01766	-.00009	.00492	.02560	.84495	.70234	1.20305
10.300	-2.924	35.46532	1.09630	.08129	-.01776	-.00153	.00323	.01798	.84573	.70229	1.20425
10.300	-1.950	35.44739	1.09607	.08121	-.01824	-.00310	.00175	.00982	.84582	.70183	1.20516
10.300	-.988	35.44498	1.09729	.08048	-.01864	-.00473	.00023	.00167	.84726	.70190	1.20710
10.300	-.008	35.43656	1.09780	.08082	-.01865	-.00622	-.00152	-.00620	.84756	.70239	1.20668
10.300	.963	35.44483	1.09704	.08034	-.01959	-.00771	-.00310	-.01363	.84714	.70165	1.20735
10.300	GRADIENT	-.00949	.00071	-.00021	-.00031	-.00159	-.00166	-.00617	.00062	.00010	.00099

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TABULATED SOURCE DATA - CHT96 (LA-11)

(RP0065) (15 AUG 75)

LA-11, CHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

REFERENCE DATA

BREF = 21.7866 88.14. 2ARP = 6.2902 INCHES
 LREF = 3.5611 INCHES 1ARP = .0000 INCHES
 WREF = 7.0251 INCHES 2ARP = .0000 INCHES
 SCALE = .0075

BETA = .000 ELEVTR = -30.000
 AILRON = 10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 70/ 0 RNVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	BETA	ON	CA	CLM	CLL	CYN	CY	CL	CD	L/O
10.300	9.979	-.00573	.13587	.07187	-.01668	.00196	-.00070	-.00269	.12136	.09433	1.29637
10.300	14.876	-.00416	.27328	.06894	-.01270	.00140	-.00093	-.00196	.24811	.13774	1.80133
10.300	20.113	-.00255	.44324	.07340	-.00778	.00132	-.00116	-.00173	.39087	.22134	1.76636
10.300	25.165	-.00186	.63141	.07801	-.00739	.00149	-.00126	-.00214	.53832	.33909	1.58737
10.300	30.176	-.00169	.84186	.07802	-.00947	.00126	-.00109	-.00245	.68856	.49061	1.40349
10.300	35.415	-.00090	1.08290	.06128	-.01685	.00182	-.00068	-.00306	.83344	.69378	1.20419
GRADIENT		.00019	.03726	.00044	.00005	-.00001	-.00001	-.00002	.02834	.02349	-.01011

(RP0066) (15 AUG 75)

LA-11, CHT 96, ROCKWELL ORB. 0898 W/MOD. NOSE

REFERENCE DATA

BREF = 21.7866 88.14. 2ARP = 6.2902 INCHES
 LREF = 3.5611 INCHES 1ARP = .0000 INCHES
 WREF = 7.0251 INCHES 2ARP = .0000 INCHES
 SCALE = .0075

BETA = -5.000 ELEVTR = -30.000
 AILRON = 10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 71/ 0 RNVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	BETA	ON	CA	CLM	CLL	CYN	CY	CL	CD	L/O
10.300	9.832	-4.91851	.14005	.07192	-.01338	.00486	.00468	.03598	.12555	.09300	1.32155
10.300	15.081	-4.97909	.28041	.06896	-.01152	.00514	.00713	.03033	.25255	.14051	1.79739
10.300	20.113	-4.99803	.45455	.07436	-.00713	.00627	.00750	.03184	.40126	.22814	1.77441
10.300	25.175	-4.97230	.64430	.07733	-.00562	.00769	.00746	.03165	.55021	.34406	1.59916
10.300	30.180	-4.91091	.85573	.08022	-.00684	.00875	.00732	.03234	.69940	.49954	1.40011
10.300	35.477	-4.80357	1.08676	.06177	-.01726	.00967	.00716	.03502	.84674	.70369	1.20296
GRADIENT		.00453	.03766	.00047	.00003	.00020	.00007	.00001	.02861	.02382	-.01101

(RPD067) (15 AUG 75)

LA-11, CPHT 96, ROCKWELL CRB, 0.998 W/MOD, NOSE

REFERENCE DATA

SREF = 21.7686 30-IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

ALPHA = 35.000 ELEVTR = -30.000
 AIRCON = 10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 77/0 RNVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACN	BETA	ALPHA	CN	CA	CLM	COL	CYN	CY	CL	CD	L/D
10.300	-6.756	35.52913	1.04127	.08016	-.01672	.01222	.01368	.76655	.80082	.67034	1.19456
10.300	-7.751	35.48648	1.04492	.07546	-.01627	.01382	.01200	.05909	.80471	.67129	1.19875
10.300	-6.789	35.45723	1.04496	.07331	-.01572	.01211	.01049	.05146	.80842	.67310	1.20104
10.300	-5.805	35.48632	1.05114	.07314	-.01548	.01080	.02462	.04393	.81089	.67346	1.20408
10.300	-4.883	35.39851	1.05213	.07936	-.01545	.03951	.07713	.03652	.81166	.67415	1.20398
10.300	-3.867	35.37895	1.05137	.07893	-.01486	.03870	.03541	.02874	.81153	.67308	1.20569
10.300	-2.911	35.35529	1.05334	.07882	-.01514	.03843	.03304	.02127	.81347	.67379	1.20730
10.300	-1.937	35.34781	1.05222	.07828	-.01520	.01493	.02245	.01362	.81296	.67280	1.20867
10.300	-.967	35.34343	1.05246	.07896	-.01529	.03341	.07393	.07555	.81324	.67350	1.20747
10.300	.005	35.34001	1.05384	.07864	-.01594	.03193	-.00778	-.00187	.81454	.67390	1.20795
10.300	.971	35.34167	1.05229	.07827	-.01597	.03050	-.00236	-.00936	.81310	.67254	1.20899
12.300	GRADIENT	-.00958	.00016	-.00012	-.00014	-.00155	-.00161	-.00789	.00733	-.00703	.00073

(RPD068) (15 AUG 75)

LA-11, CPHT 96, ROCKWELL CRB, 0.998 W/MOD, NOSE

REFERENCE DATA

SREF = 21.7686 30-IN. XREF = 6.2902 INCHES
 LREF = 3.5611 INCHES YREF = .0000 INCHES
 BREF = 7.0251 INCHES ZREF = .0000 INCHES
 SCALE = .0075

ALPHA = 30.000 ELEVTR = -30.000
 AIRCON = 10.000 BOFLAP = -14.250

PARAMETRIC DATA

RUN NO. 78/0 RNVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MACN	BETA	ALPHA	CN	CA	CLM	COL	CYN	CY	CL	CD	L/D
10.300	-6.980	30.38013	.80354	.07948	-.00726	.01383	.01320	.06558	.65350	.47426	1.37794
10.300	-7.809	30.30241	.80846	.07884	-.00738	.01261	.01165	.05773	.65622	.47599	1.38284
10.300	-6.984	30.27001	.80833	.07776	-.00722	.01180	.01000	.04974	.65892	.47462	1.38831
10.300	-5.838	30.25037	.80907	.07725	-.00722	.00985	.00857	.04145	.65998	.47432	1.39141
10.300	-4.999	30.22324	.80831	.07649	-.00674	.00847	.00715	.03316	.65992	.47299	1.39520
10.300	-3.853	30.21729	.81304	.07673	-.00759	.00724	.00568	.02587	.66395	.47549	1.39835
10.300	-2.972	30.20492	.81320	.07687	-.00806	.00567	.00400	.01861	.66419	.47543	1.39703
10.300	-1.896	30.18729	.81742	.07587	-.00857	.00421	.00226	.01222	.66842	.47660	1.40247
10.300	-1.004	30.18490	.81706	.07532	-.00883	.03255	.00071	.00532	.66840	.47592	1.40445
10.300	-.002	30.18088	.81817	.07550	-.00896	.00126	-.00100	-.00169	.66925	.47665	1.40407
10.300	.994	30.18658	.81856	.07599	-.00906	.03000	-.00258	-.00859	.66935	.47727	1.40243
12.300	GRADIENT	-.00709	.00162	-.00019	-.00038	-.00146	-.00165	-.00697	.00155	.00056	.00160

TABULATED SOURCE DATA - CPNT96 (LA-11)

LA-11, CPNT 96, ROCKWELL CRB. 0698 W/MOD. NOSE

(RP0066) (15 AUG 73)

REFERENCE DATA

REF = 21.7666 98.1N. 100P = 6.2902 INCHES
 LREF = 2.5611 INCHES 100P = .0000 INCHES
 BREF = 7.0251 INCHES 200P = .0000 INCHES
 SCALE = .0075

PARAMETRIC DATA

ALPHA = 25.000 ELEVTR = -30.000
 ALLRON = 10.000 BOFLAP = -14.250

RUN NO. 75/0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	ALPHA	ON	CA	CLM	CLB	CYN	CY	CL	CD	L/D
10.300	-6.0264	25.20752	.62937	.08164	-.00395	.01364	.01222	.07014	.53425	.34293	1.59787
10.300	-6.011	25.29591	.63207	.08005	-.00467	.01183	.01150	.05992	.53726	.34246	1.56865
10.300	-7.011	25.27796	.63252	.07910	-.00474	.01090	.01027	.02031	.53617	.34164	1.57326
10.300	-6.011	25.26382	.63274	.07930	-.00536	.00956	.00926	.04306	.53672	.34103	1.57966
10.300	-6.029	25.26066	.63320	.07742	-.00515	.00814	.00767	.03511	.53961	.34023	1.56602
10.300	-4.004	25.24645	.63356	.07741	-.00544	.00664	.00567	.02816	.54002	.34025	1.56710
10.300	-5.006	25.23721	.63612	.07693	-.00576	.00570	.00466	.02084	.54260	.34081	1.59809
10.300	-1.999	25.24107	.63641	.07675	-.00606	.00453	.00313	.01529	.54473	.34165	1.59439
10.300	-1.015	25.23613	.64160	.07760	-.00753	.00307	.00116	.00846	.54726	.34374	1.59215
10.300	-1.005	25.22947	.64066	.07610	-.00866	.00209	-.00043	.00196	.54626	.34373	1.58927
10.300	GRADIENT	-.00412	.00197	.00060	-.00046	-.00117	-.00161	-.00609	.00172	.00099	.00044

LA-11, CPNT 96, ROCKWELL CRB. 0698 W/MOD. NOSE

(RP0070) (15 AUG 73)

REFERENCE DATA

REF = 21.7666 98.1N. 100P = 6.2902 INCHES
 LREF = 2.5611 INCHES 100P = .0000 INCHES
 BREF = 7.0251 INCHES 200P = .0000 INCHES
 SCALE = .0075

PARAMETRIC DATA

ALPHA = 20.000 ELEVTR = -30.000
 ALLRON = 10.000 BOFLAP = -14.250

RUN NO. 74/0 RVL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	ALPHA	ON	CA	CLM	CLB	CYN	CY	CL	CD	L/D
10.300	-6.0264	20.02997	.43675	.08162	-.00562	.01144	.00995	.07817	.34416	.22714	1.69137
10.300	-6.011	20.02928	.43342	.07575	-.00635	.01006	.01096	.05769	.38126	.21962	1.73604
10.300	-7.043	20.01970	.43660	.07555	-.00730	.00866	.01002	.04690	.38296	.22031	1.74266
10.300	-6.043	20.01842	.43751	.07452	-.00763	.00731	.00652	.04705	.38557	.21979	1.75422
10.300	-6.043	20.01941	.43974	.07367	-.00726	.00627	.00713	.03279	.38766	.21994	1.76354
10.300	-4.031	20.01835	.44140	.07412	-.00787	.00539	.00564	.02732	.38936	.22074	1.76383
10.300	-3.016	20.01459	.44010	.07306	-.00767	.00466	.00452	.01975	.38652	.21999	1.77119
10.300	-2.019	20.02397	.44123	.07270	-.00711	.00365	.00267	.01267	.38966	.21939	1.7767
10.300	-1.013	20.01561	.44349	.07476	-.00649	.00253	.00110	.00719	.39299	.22273	1.7613
10.300	-.006	20.02759	.44563	.07456	-.00763	.00173	-.00045	.00069	.39315	.22266	1.7616
10.300	1.005	20.02156	.44364	.07323	-.00701	.00064	-.00196	-.00506	.39175	.22069	1.7751
10.300	GRADIENT	.00133	.00091	.00006	-.00009	-.00096	-.00155	-.00639	.00063	.00037	.00073

TABULATED SOURCE DATA - CPM796 (LA-11)

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(RP0071) (15 AUG 73)

LA-11, CPMT 96, RODWELL CRB. 0098 WHOD. NOSE

PARAMETRIC DATA

ALPHA = 15.000 ELEVTR = -30.000
 AILRON = 10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 51.7666 96. IN. WARP = 6.2902 INCHES
 LREF = 3.9611 INCHES WARP = .0000 INCHES
 SREF = 7.0231 INCHES ZWAP = .0000 INCHES
 SCALE = .0075

RUN NO. 75/ 0 RWL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-9.026	14.9421	.26568	.07724	-.00461	.01006	.00782	.07996	.23697	.14319	1.63495
10.300	-9.030	14.9421	.26675	.07419	-.01010	.00971	.00776	.06592	.23655	.14086	1.60999
10.300	-7.026	14.95824	.26650	.07229	-.01127	.00799	.00620	.05505	.23661	.13662	1.72276
10.300	-6.015	14.95565	.26606	.07100	-.01195	.00633	.00754	.04355	.24065	.13776	1.74671
10.300	-5.027	14.96936	.26822	.06967	-.01223	.00542	.00717	.03340	.23945	.13510	1.77234
10.300	-4.015	14.96357	.27395	.07199	-.01280	.00496	.00402	.03066	.24610	.14030	1.75414
10.300	-3.006	14.97547	.27211	.06834	-.01310	.00364	.00363	.02080	.24521	.13633	1.79661
10.300	-2.009	14.96883	.27474	.06606	-.01362	.00303	.00251	.01434	.24779	.13660	1.61140
10.300	-1.013	14.96756	.27569	.06667	-.01367	.00226	.00126	.00773	.24875	.13768	1.60669
10.300	-.007	14.96737	.27564	.06900	-.01216	.00167	-.00034	.00117	.24862	.13799	1.60166
10.300	.967	14.96561	.27745	.06966	-.01249	.00107	-.00179	-.00385	.24999	.13906	1.79771
10.300	GRADIENT	.00420	.00085	-.00025	.00012	-.00077	-.00122	-.00709	.00267	-.00001	.00634

(RP0072) (15 AUG 73)

LA-11, CPMT 96, RODWELL CRB. 0098 WHOD. NOSE

PARAMETRIC DATA

ALPHA = 10.000 ELEVTR = -30.000
 AILRON = 10.000 BOFLAP = -14.250

REFERENCE DATA

REF = 51.7666 96. IN. WARP = 6.2902 INCHES
 LREF = 3.9611 INCHES WARP = .0000 INCHES
 SREF = 7.0231 INCHES ZWAP = .0000 INCHES
 SCALE = .0075

RUN NO. 76/ 0 RWL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	ALPHA	ON	CA	CLM	CL	CYN	CY	CL	CD	L/D
10.300	-6.969	9.95735	.12735	.07656	-.01152	.00849	.00472	.06227	.11239	.09748	1.15288
10.300	-7.969	9.97801	.12773	.07446	-.01277	.00825	.00463	.06973	.11290	.09546	1.18266
10.300	-6.941	9.99636	.12834	.07275	-.01369	.00722	.00466	.05868	.11396	.09391	1.21357
10.300	-5.937	10.01906	.13026	.07176	-.01447	.00616	.00449	.04837	.11561	.09333	1.24086
10.300	-4.965	10.02963	.13056	.06990	-.01501	.00519	.00424	.03876	.11622	.09253	1.25595
10.300	-3.963	10.04254	.13332	.07032	-.01525	.00450	.00332	.03034	.11909	.09206	1.29340
10.300	-2.974	10.05764	.13562	.06859	-.01548	.00370	.00239	.02166	.12131	.09083	1.30967
10.300	-1.965	10.07050	.13902	.06659	-.01599	.00269	.00169	.01361	.12193	.09131	1.33528
10.300	-.965	10.08699	.13705	.07029	-.01553	.00219	.00062	.00574	.12267	.09315	1.31693
10.300	.000	10.08226	.13659	.07252	-.01614	.00160	-.00069	-.00237	.12378	.09562	1.29455
10.300	.967	10.08966	.13607	.07169	-.01576	.00119	-.00163	-.01012	.12336	.09492	1.29973
10.300	GRADIENT	.00563	.00124	.00031	-.00015	-.00068	-.00099	-.00621	.00116	.00053	.00506

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TABULATED SOURCE DATA - CPTING (LA-11)
LA-11, CPT 96, ROOSELL CRG. 0898 WACD. NOSE

08P0073) (15 AUG 73)

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7966 86.1N. 100P = 6.2902 INCHES
LREF = 3.5611 INCHES 100P = .0000 INCHES
REF = 7.0251 INCHES 200P = .0000 INCHES
SCALE = .0075

BETA = .000 ELEVTR = .000
AIRLON = .000 BOFLAP = .000

RUN NO. 22/0 RVAL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACD	ALPHA	BETA	ON	CA	CLM	CEL	CYM	CY	CL	CD	L/D
10.300	10.036	-0.0037	.1959	.0715	-.00991	.00075	-.00120	-.00178	.14074	.09758	1.44226
10.300	15.195	-.00283	.30521	.07060	-.00360	.00056	-.00118	-.00274	.27997	.14839	1.85975
10.300	20.131	-.00228	.48475	.07715	-.04271	.00045	-.00132	-.00250	.42859	.25987	1.79126
10.300	25.265	-.00179	.68270	.08129	-.05739	.00032	-.00136	-.00323	.59174	.36916	1.80294
10.300	30.222	-.00242	.88280	.08289	-.07645	-.00032	-.00127	-.00448	.73393	.53311	1.40892
10.300	35.463	-.00340	1.18222	.08688	-.10428	-.00114	-.00121	-.00580	.91119	.75844	1.20140
GRADIENT		.00001	.04052	.00071	-.00290	-.00007	-.00000	-.00015	.03071	.02591	-.01548

LA-11, CPT 96, ROOSELL CRG. 0898 WACD. NOSE

08P0074) (15 AUG 73)

PARAMETRIC DATA

REFERENCE DATA

REF = 21.7966 86.1N. 100P = 6.2902 INCHES
LREF = 3.5611 INCHES 100P = .0000 INCHES
REF = 7.0251 INCHES 200P = .0000 INCHES
SCALE = .0075

BETA = -5.000 ELEVTR = .000
AIRLON = .000 BOFLAP = .000

RUN NO. 23/0 RVAL = 1.00 GRADIENT INTERVAL = -5.00/ 5.00

WACD	ALPHA	BETA	ON	CA	CLM	CEL	CYM	CY	CL	CD	L/D
10.300	10.084	-4.95773	.19981	.07277	-.00994	.00058	.00367	.03704	.14440	.08929	1.44990
10.300	15.037	-5.01454	.31382	.07514	-.00337	.00542	.00479	.03644	.28330	.15383	1.83974
10.300	20.026	-5.03846	.49534	.07880	-.04245	.00955	.00591	.03472	.43848	.24347	1.80095
10.300	25.275	-5.01093	.70738	.08155	-.05596	.00666	.00713	.03037	.60485	.37577	1.80384
10.300	30.225	-4.94763	.93230	.08556	-.07403	.00737	.00717	.02949	.76266	.54334	1.40364
10.300	35.344	-4.84056	1.19199	.08980	-.10373	.00708	.00714	.03051	.91780	.76584	1.19642
GRADIENT		.00459	.04063	.00066	-.00295	.00008	.00014	-.00032	.03073	.02806	-.01565